

Well Name: DOUBLE STAMP FED COM	Well Location: T20S / R32E / SEC 14 / SESW / 32.5674377 / -103.7399692	County or Parish/State: LEA / NM
Well Number: 122H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM63016	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: CIVITAS PERMIAN OPERATING LLC	

Notice of Intent

Sundry ID: 2830694

Type of Submission: Notice of Intent Type of Action: APD Change

Date Sundry Submitted: 01/12/2025 Time Sundry Submitted: 07:11

Date proposed operation will begin: 02/01/2025

Procedure Description: Civitas Permian Operating LLC (“CPO”) respectfully requests to amend the approved APD for the above-captioned well. CPO is proposing to amend the BHL and associated wellbore geometry. The proposed changes are as follows: 122H – Sundry ID #2830694 (30-025-54002) 1) SHL is unchanged. 2) Proposed KOP is Section 14, T20S, R32E @ 50’ FSL / 331’ FWL. 3) Proposed FTP is Section 14, T20S, R32E @ 100’ FSL / 331’ FWL. 4) Proposed LTP is Section 11, T20S, R32E @ 100’ FNL / 331’ FWL. 5) Proposed BHL is Section 11, T20S, R32E @ 5’ FNL / 331’ FWL. *Note – the Double Stamp FED COM #121H is also being sundried (ID #2830687) to account for these and other related changes. The location is currently under construction and first is anticipated in early February 2025. 122H – Sundry ID #2830694 (30-025-54002) 1) SHL is unchanged. 2) Proposed KOP is Section 14, T20S, R32E @ 50’ FSL / 331’ FWL. 3) Proposed FTP is Section 14, T20S, R32E @ 100’ FSL / 331’ FWL. 4) Proposed LTP is Section 11, T20S, R32E @ 100’ FNL / 331’ FWL. 5) Proposed BHL is Section 11, T20S, R32E @ 5’ FNL / 331’ FWL.

NOI Attachments

Procedure Description

- APD_Drilling_Plan_Double_Stamp__122H_01.12.2025_20250112191103.pdf
- Double_Stamp_Fed_Com_122H_Directional_Plan_01.12.2025_20250112191052.pdf
- Double_Stamp_Fed_Com_122H_AC_01.12.2025_20250112191035.pdf
- DOUBLE_STAMP_FED_COM_122H_C102_Revised_01.07.2025_20250112191003.pdf

Received by OCD: 1/27/2025 8:00:46 PM

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Well Number: 122H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM63016	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: CIVITAS PERMIAN OPERATING LLC	

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: NATHAN BENNETT	Signed on: JAN 12, 2025 07:11 PM
Name: CIVITAS PERMIAN OPERATING LLC	
Title: Director Permitting & Compliance	
Street Address: 555 17TH STREET SUITE 3500	
City: DENVER	State: CO
Phone: (303) 312-8166	
Email address: NBENNETT@CIVIRESOURCES.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: ALLISON MORENCY	BLM POC Title: Contractor WO
BLM POC Phone: 2029127157	BLM POC Email Address: amorency@blm.gov
Disposition: Approved	Disposition Date: 01/24/2025
Signature: Allison Morency	

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
SUNDRY NOTICES AND REPORTS ON WELLS <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No.
		6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well ☐ Oil Well ☐ Gas Well ☐ Other		8. Well Name and No.
2. Name of Operator		9. API Well No.
3a. Address	3b. Phone No. (include area code)	10. Field and Pool or Exploratory Area
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
	Title	
Signature	Date	

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Additional Remarks

122H Sundry ID #2830694 (30-025-54002)

- 1) SHL is unchanged.
- 2) Proposed KOP is Section 14, T20S, R32E @ 50 FSL / 331 FWL.
- 3) Proposed FTP is Section 14, T20S, R32E @ 100 FSL / 331 FWL.
- 4) Proposed LTP is Section 11, T20S, R32E @ 100 FNL / 331 FWL.
- 5) Proposed BHL is Section 11, T20S, R32E @ 5 FNL / 331 FWL.

Location of Well

0. SHL: SESW / 549 FSL / 1694 FWL / TWSP: 20S / RANGE: 32E / SECTION: 14 / LAT: 32.5674377 / LONG: -103.7399692 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 100 FSL / 1650 FWL / TWSP: 20S / RANGE: 32E / SECTION: 14 / LAT: 32.566205 / LONG: -103.740113 (TVD: 9797 feet, MD: 10154 feet)

BHL: NENW / 5 FNL / 1650 FWL / TWSP: 20S / RANGE: 32E / SECTION: 11 / LAT: 32.5949573 / LONG: -103.7401095 (TVD: 9753 feet, MD: 20089 feet)



Drilling Operations Plan
 Double Stamp Fed Com #122H
 Civitas Permian Operating, LLC
 SHL 549' FSL & 1694' FWL, Sec. 14
 BHL 5' FNL & 331' FWL, Sec. 11
 T20S, R32E Lea County, NM

Elevation above Sea Level: 3531'

DRILLING PROGRAM

1. Estimated Tops

Formation	TVD	MD	Lithologies	Bearing
Rustler Anhydrite	1,495	1,495	Surface	Anhydrite
Top Salt	1,755	1,755	Salt	Salt
Yates	2,921	2,921	Sandstone	None
Capitan Reef Complex	3,561	3,561	Carbonate	None
DMG	4,630	4,665	Sandstone	None
Brushy Canyon	7,410	7,544	Sandstone	Hydrocarbons
Bone Spring Lime	7,735	7,882	Limestone	Hydrocarbons
Upper Avalon	7,790	7,941	Carbonate	Hydrocarbons
Middle Avalon	8,200	8,363	Carbonate	Hydrocarbons
Lower Avalon	8,535	8,702	Carbonate	Hydrocarbons
1st BS Sand	8,760	8,929	Sandstone	Hydrocarbons
2nd BS Carb	9,090	9,261	Carbonate	Hydrocarbons
2nd BS Sand	9,535	9,742	Sandstone	Hydrocarbons
KOP	9,154	9,322	Carbonate	Hydrocarbons
TD	9,691	20,150	Sandstone	Hydrocarbons

2. Notable Zones

2nd Bone Spring Sand is the formation target.

3. Pressure Control

Pressure Control Equipment (See Schematics):

At 20,150', a 5M pressure control system is required. The BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and 1 annular preventer will be used below surface casing to TD. See attachments for BOP and choke manifold diagrams. Also present will be an accumulator that meets the requirements of 43 CFR 3172 for the pressure rating of the BOP stack. A rotating head will also be installed as needed. BOP will be inspected and operated as recommended in 43 CFR 3172. A top drive check valve and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position. The wellhead will be a multi-bowl speed head.

BOP Test procedure will be as follows:



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After surface casing is set and the BOP is nipped up, the BOP pressure tests will be made with a third party tester to 250 psi low, 5000 psi high, and the annular preventer will be tested to 250 psi low, 2500 psi high.

Variance Requests:

Civitas requests a variance to run a multi-bowl speed head for setting the Intermediate and Production Strings. Civitas requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used. Civitas requests a variance to have the option of batch drilling this well with other wells on the same pad. If this well is batch drilled, after cementing a casing string, a 5M dry hole cap with bleed off valve will be installed. The rig will then walk to another well on the pad.

4. Casing & Cement

All Casing will be new.

Casing Design:

Section	Drilled Interval			Casing Size	Standard	Tapered	Casing Set Depths				Casing Details					
	Hole Size	Top	Btm				Top MD	Bottom MD	Top TVD	BTM TVD	Grade	Weight	Thread	Collapse	Burst	Tension
Surface	20	0	1,520	16	API	No	0	1,520	0	1,520	J-55	75	BTC	1.13	1.15	1.6
1st Intermediate	14 3/4	1,520	2,971	11 3/4	API	No	0	2,971	0	2,821	J-55	47	BTC	1.13	1.15	1.6
2nd Intermediate	10 5/8	2,971	4,515	8 5/8	API	No	0	4,515	0	4,480	J-55	32	BTC	1.13	1.15	1.6
Production	7 7/8	4,515	20,150	5 1/2	NON API	No	0	20,150	0	9,691	P-110	20	Geoconn	1.13	1.15	1.6

Cement Volumes:

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Surface	Lead	0	975	1.72	1677	13.5	75%	C	5% NCI + LCM
	Tail	1220	310	1.33	412	14.8	75%	C	5% NCI + LCM
1st Intermediate	Lead	0	474	2.72	1289	11.0	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	2271	229	1.72	394	13.5	30%	C	5% NaCl + LCM
2nd Intermediate	Lead	0	358	2.72	974	11.0	65%	C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	3515	159	1.72	273	13.5	30%	C	5% NaCl + LCM
Production	Lead	4315	276	3.38	932	10.5	20%	C	Fluid Loss + Dispersant + Retarder + LCM
	Tail	8822	2261	1.44	3255	13.2	20%	H	Fluid Loss + Dispersant + Retarder + LCM

5. Mud Program

Mud Design:

Name	Top	Bottom	Type	Mud Weight	Visc	Fluid Loss
Surface	0	1,520	FW Spud Mud	8.40	28	NC
1st Intermediate	1,520	2,971	Brine Water	10.00	27-30	NC
2nd Intermediate	2,971	4,515	FW/Cut Brine	9.00	27-30	NC
Production	4,515	20,150	FW/Cut Brine	9.00	27-30	NC

Electronic Pason mud monitor system complying with 43 CFR 3172 will be used. All necessary mud products (i.e., barite, pac) for weight addition and fluid loss control will always be on site. Mud program is subject to change due to hole conditions. A closed loop system will be used.



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6. Cores, Tests, & Logs

- Electric Logging Program: No open-hole logs are planned at this time.
- GR will be collected while drilling through the MWD tools from KOP to TD.
- A 2-person mud logging program will be used from KOP to TD.
- No DSTs or cores are planned at this time.
- CBL w/ CCL from as far as gravity will let it fall to TOC.

7. Down Hole Conditions

No abnormal pressure or temperature is expected. Maximum expected bottom hole pressure is $\approx 4,564$ psi. Expected bottom hole temperature is $\approx 165^{\circ}$ F.

Civitas does not anticipate that there will be enough H₂S from the surface to the 2nd Bone Spring Sand formations to meet the BLM's 43 CFR 3176 requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for drilling and completing this well. Civitas has an H₂S safety package on all wells and an "H₂S Drilling Operations Plan" is attached. Adequate flare lines will be installed off the mud/gas separator where gas may be safely flared. All personnel will be familiar with all aspects of safe operation of equipment being used.

In the event H₂S is encountered, it will be reported in a written format to the Division as stated in R-111-Q Section B.6.

8. Other Information

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 15 days. If production casing is run an additional 60 days will be required to complete and construct surface facilities.

- A. **Anticollision:** While drilling a SF of 1.0 will be maintained for any active or inactive well through the salt interval. For any wells that have only inclination surveys, maintaining a 300' center-to-center will be done.
- B. **Centralization:**
 - a. **Surface:**
 - i. One centralizer per joint across the shoe track
 - ii. One centralizer per 2 joints from casing shoe to the top of FW zone
 - iii. One centralizer per 3 joints to surface
 - b. **Intermediate 1:**
 - i. One centralizer per joint across the shoe track
 - ii. One centralizer per 3 joints to surface
 - iii. **Cement placement simulation attached**

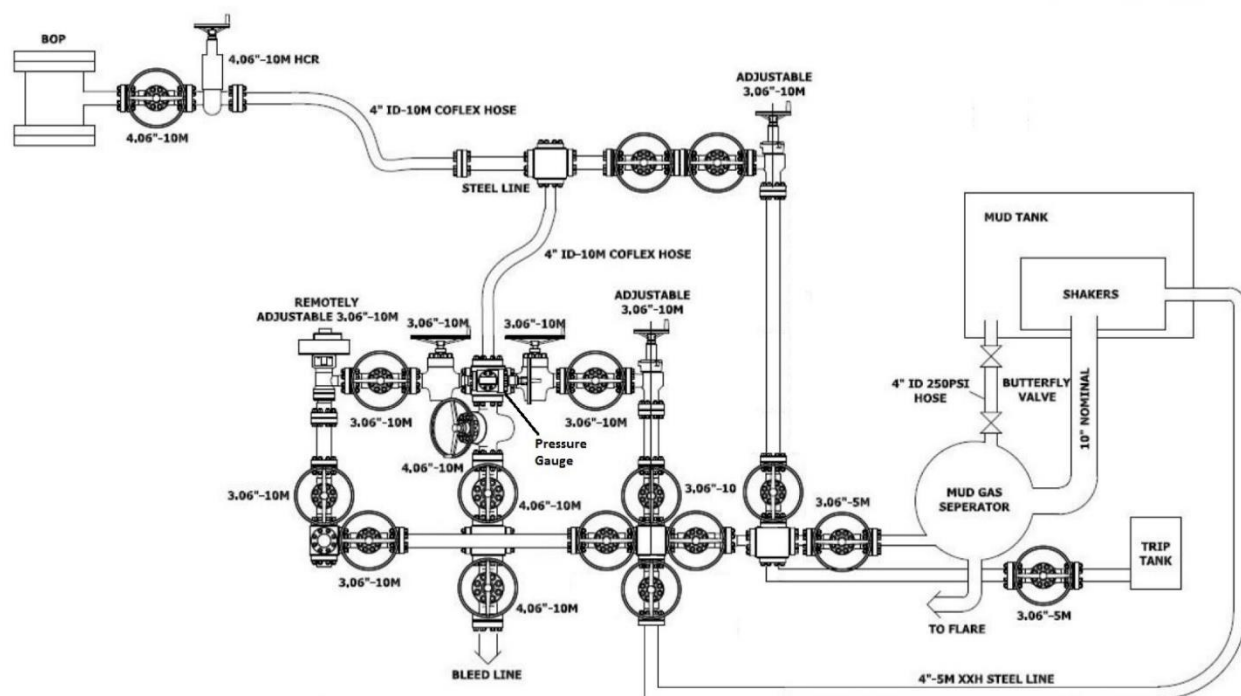
C. **Bradenhead Squeeze Post Frac:** This will be performed post frac with the following slurry:

Name	Type	Top MD	Sacks	Yield	Cu. Ft	Weight	Excess	Cement	Additives
Post Frac Bradenhead	Primary	2,870	239	1.72	411	13.5	0	C	5% NaCl + LCM



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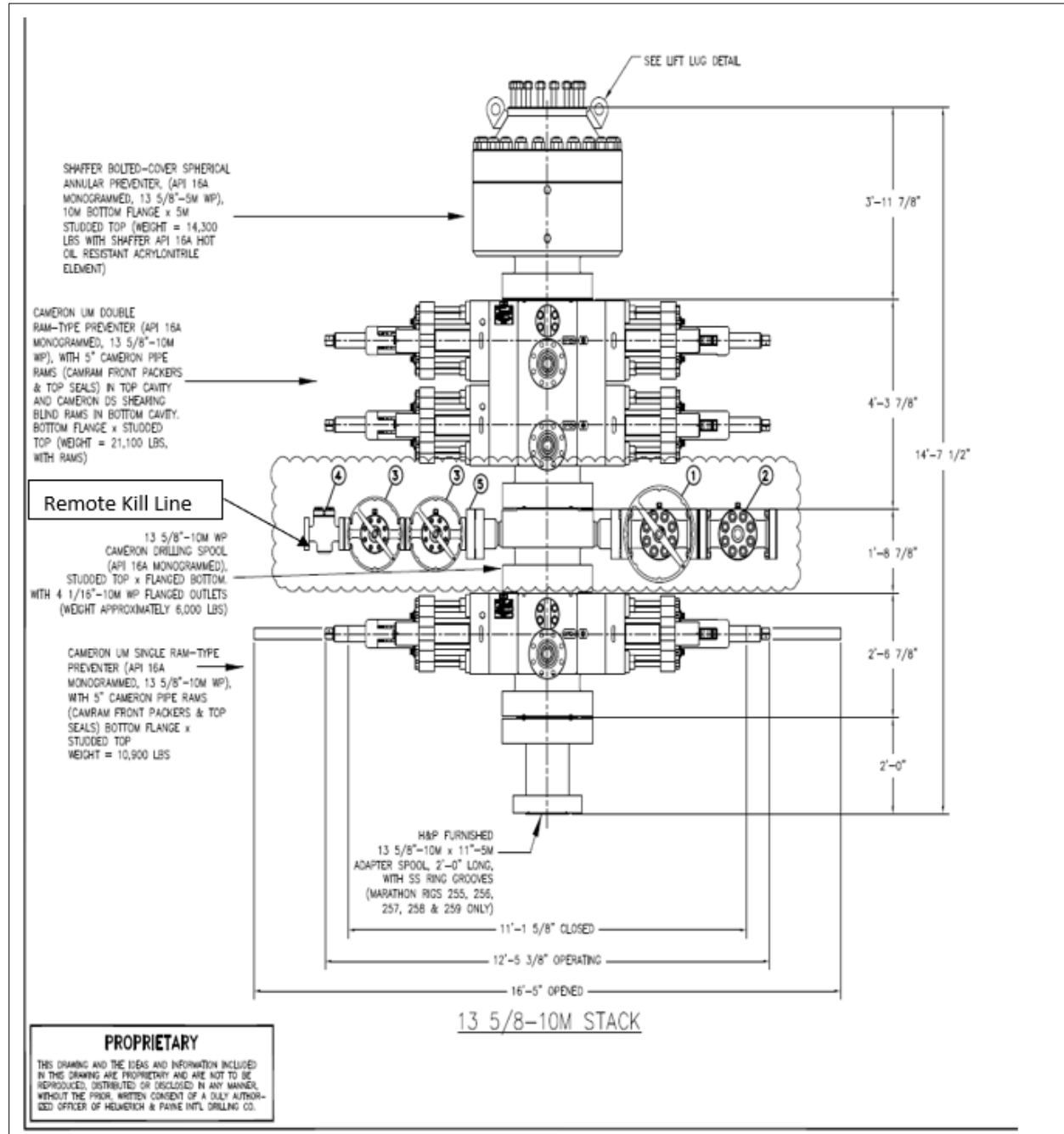
10M Choke Layout





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10,000 psi BOP Stack

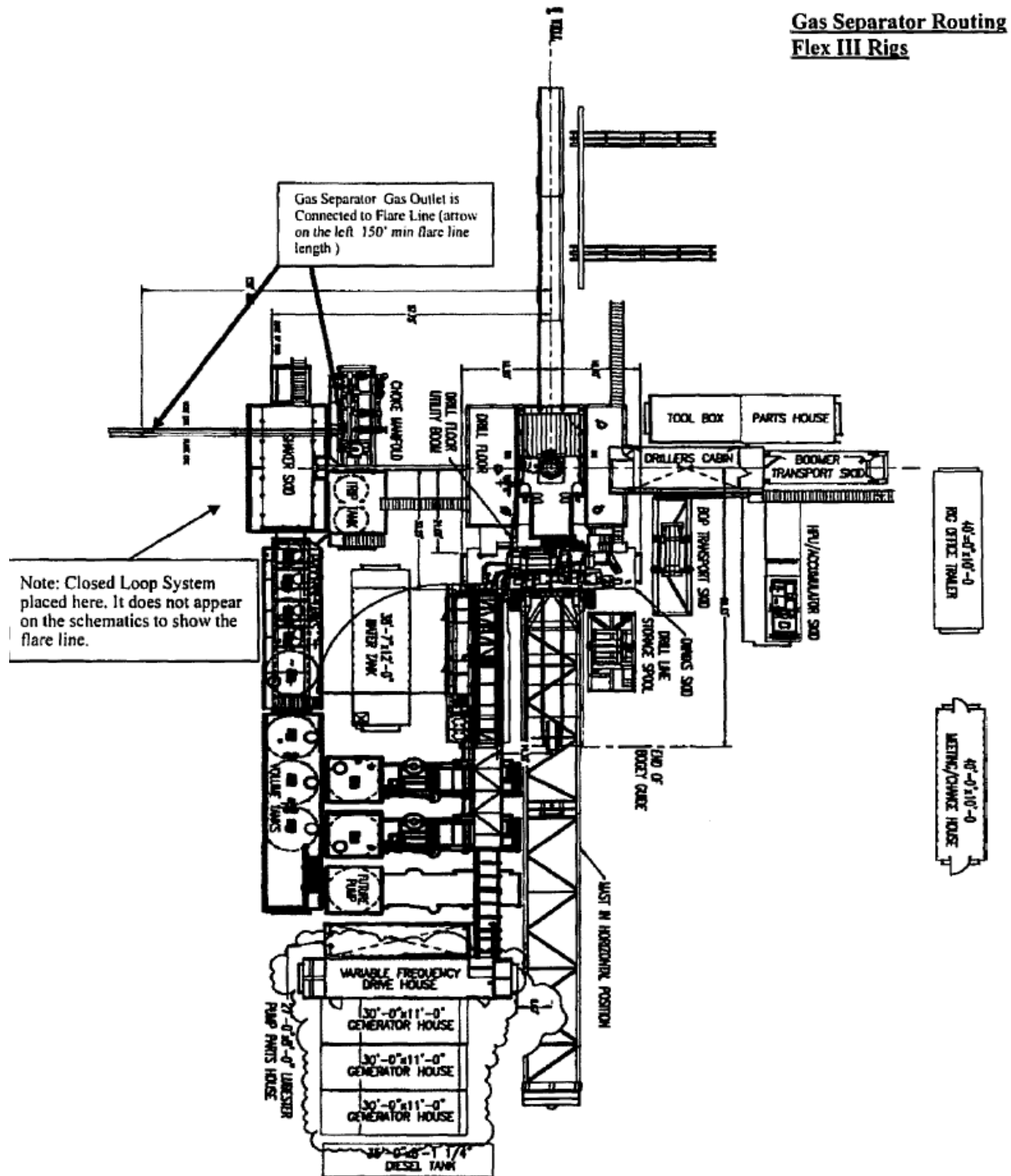




CIVITAS

Drilling Operations Plan

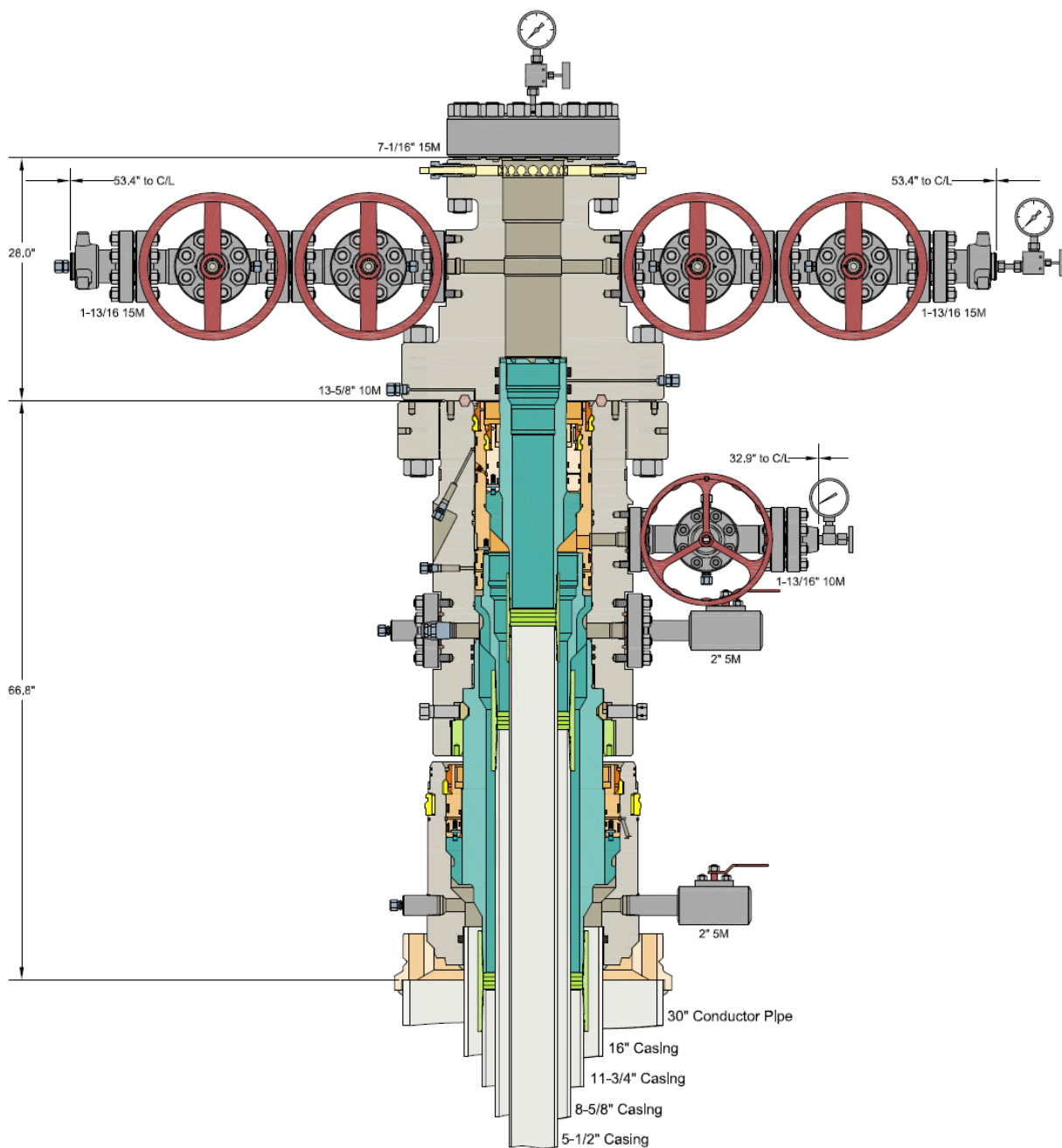
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Multi-bowl Wellhead Design





Civitas Permian Operating, LLC

Lea County, New Mexico (NAD 83)

Double Stamp Project

Double Stamp Fed Com 122H

Wellbore #1

Plan: Design #0.0

Standard Planning Report

10 January, 2025




MS Directional
 Planning Report


Database:	TRG_EDMConroe	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Company:	Civitas Permian Operating, LLC	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site:	Double Stamp Project	North Reference:	Grid
Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #0.0		

Project	Lea County, New Mexico (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Double Stamp Project			
Site Position:		Northing:	570,674.00 usft	Latitude:	32.567438
From:	Map	Easting:	724,133.00 usft	Longitude:	-103.739969
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	

Well	Double Stamp Fed Com 122H					
Well Position	+N/-S	0.00 usft	Northing:	570,674.00 usft	Latitude:	32.567438
	+E/-W	0.00 usft	Easting:	724,133.00 usft	Longitude:	-103.739969
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,531.00 usft
Grid Convergence:	0.319 °					

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2025	1/10/2025	6.383	60.250	47,546.300

Design	Design #0.0				
Audit Notes:					
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	359.69	

Plan Survey Tool Program	Date	1/10/2025			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	20,150.35	Design #0.0 (Wellbore #1)	MWD+IFR1+SAG+FDIR	
				OWSG MWD + IFR1 + Sag	



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Project:	Lea County, New Mexico (NAD 83)	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site:	Double Stamp Project	North Reference:	Grid
Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #0.0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.000	
4,013.74	15.21	248.64	4,001.88	-48.72	-124.55	1.50	1.50	0.00	248.637	
8,154.97	15.21	248.64	7,998.12	-444.39	-1,136.13	0.00	0.00	0.00	0.000	
9,168.71	0.00	0.00	9,000.00	-493.10	-1,260.67	1.50	-1.50	0.00	180.000	
9,322.71	0.00	0.00	9,154.00	-493.10	-1,260.67	0.00	0.00	0.00	0.000	
10,224.71	90.20	352.10	9,726.95	76.40	-1,339.70	10.00	10.00	0.00	352.100	
10,604.32	90.20	359.69	9,725.61	454.76	-1,366.85	2.00	0.00	2.00	89.951	
20,150.35	90.20	359.69	9,691.51	10,000.59	-1,418.11	0.00	0.00	0.00	0.000	PBHL - Double Star


MS Directional
 Planning Report


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Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #0.0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,495.70	0.00	0.00	1,495.70	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,756.00	0.00	0.00	1,756.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,921.00	0.00	0.00	2,921.00	0.00	0.00	0.00	0.00	0.00	0.00
Yates									
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 1.50°/100' Build									
3,100.00	1.50	248.64	3,099.99	-0.48	-1.22	-0.47	1.50	1.50	0.00
3,200.00	3.00	248.64	3,199.91	-1.91	-4.88	-1.88	1.50	1.50	0.00
3,300.00	4.50	248.64	3,299.69	-4.29	-10.97	-4.23	1.50	1.50	0.00
3,400.00	6.00	248.64	3,399.27	-7.62	-19.49	-7.52	1.50	1.50	0.00
3,500.00	7.50	248.64	3,498.57	-11.90	-30.43	-11.74	1.50	1.50	0.00
3,561.52	8.42	248.64	3,559.50	-15.01	-38.37	-14.80	1.50	1.50	0.00
Capitan Reef Complex									
3,600.00	9.00	248.64	3,597.54	-17.13	-43.80	-16.89	1.50	1.50	0.00
3,700.00	10.50	248.64	3,696.09	-23.30	-59.57	-22.98	1.50	1.50	0.00
3,800.00	12.00	248.64	3,794.16	-30.41	-77.74	-29.98	1.50	1.50	0.00
3,900.00	13.50	248.64	3,891.70	-38.44	-98.29	-37.91	1.50	1.50	0.00
4,000.00	15.00	248.64	3,988.62	-47.41	-121.21	-46.75	1.50	1.50	0.00
4,013.74	15.21	248.64	4,001.88	-48.72	-124.55	-48.04	1.50	1.50	0.00
Hold 15.21° Inc, 248.64° Azm									
4,100.00	15.21	248.64	4,085.12	-56.96	-145.62	-56.17	0.00	0.00	0.00



MS Directional Planning Report



Database:	TRG_EDMConroe	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Company:	Civitas Permian Operating, LLC	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site:	Double Stamp Project	North Reference:	Grid
Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #0.0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,200.00	15.21	248.64	4,181.62	-66.51	-170.04	-65.59	0.00	0.00	0.00	
4,300.00	15.21	248.64	4,278.12	-76.07	-194.47	-75.01	0.00	0.00	0.00	
4,400.00	15.21	248.64	4,374.62	-85.62	-218.90	-84.43	0.00	0.00	0.00	
4,500.00	15.21	248.64	4,471.12	-95.17	-243.32	-93.86	0.00	0.00	0.00	
4,600.00	15.21	248.64	4,567.62	-104.73	-267.75	-103.28	0.00	0.00	0.00	
4,665.37	15.21	248.64	4,630.70	-110.98	-283.72	-109.44	0.00	0.00	0.00	
DMG										
4,700.00	15.21	248.64	4,664.11	-114.28	-292.18	-112.70	0.00	0.00	0.00	
4,800.00	15.21	248.64	4,760.61	-123.84	-316.61	-122.12	0.00	0.00	0.00	
4,900.00	15.21	248.64	4,857.11	-133.39	-341.03	-131.55	0.00	0.00	0.00	
5,000.00	15.21	248.64	4,953.61	-142.95	-365.46	-140.97	0.00	0.00	0.00	
5,100.00	15.21	248.64	5,050.11	-152.50	-389.89	-150.39	0.00	0.00	0.00	
5,200.00	15.21	248.64	5,146.61	-162.06	-414.31	-159.81	0.00	0.00	0.00	
5,300.00	15.21	248.64	5,243.11	-171.61	-438.74	-169.23	0.00	0.00	0.00	
5,400.00	15.21	248.64	5,339.61	-181.17	-463.17	-178.66	0.00	0.00	0.00	
5,500.00	15.21	248.64	5,436.11	-190.72	-487.60	-188.08	0.00	0.00	0.00	
5,600.00	15.21	248.64	5,532.60	-200.27	-512.02	-197.50	0.00	0.00	0.00	
5,700.00	15.21	248.64	5,629.10	-209.83	-536.45	-206.92	0.00	0.00	0.00	
5,800.00	15.21	248.64	5,725.60	-219.38	-560.88	-216.35	0.00	0.00	0.00	
5,900.00	15.21	248.64	5,822.10	-228.94	-585.30	-225.77	0.00	0.00	0.00	
6,000.00	15.21	248.64	5,918.60	-238.49	-609.73	-235.19	0.00	0.00	0.00	
6,100.00	15.21	248.64	6,015.10	-248.05	-634.16	-244.61	0.00	0.00	0.00	
6,200.00	15.21	248.64	6,111.60	-257.60	-658.59	-254.03	0.00	0.00	0.00	
6,300.00	15.21	248.64	6,208.10	-267.16	-683.01	-263.46	0.00	0.00	0.00	
6,400.00	15.21	248.64	6,304.59	-276.71	-707.44	-272.88	0.00	0.00	0.00	
6,500.00	15.21	248.64	6,401.09	-286.26	-731.87	-282.30	0.00	0.00	0.00	
6,600.00	15.21	248.64	6,497.59	-295.82	-756.29	-291.72	0.00	0.00	0.00	
6,700.00	15.21	248.64	6,594.09	-305.37	-780.72	-301.14	0.00	0.00	0.00	
6,800.00	15.21	248.64	6,690.59	-314.93	-805.15	-310.57	0.00	0.00	0.00	
6,900.00	15.21	248.64	6,787.09	-324.48	-829.58	-319.99	0.00	0.00	0.00	
7,000.00	15.21	248.64	6,883.59	-334.04	-854.00	-329.41	0.00	0.00	0.00	
7,100.00	15.21	248.64	6,980.09	-343.59	-878.43	-338.83	0.00	0.00	0.00	
7,200.00	15.21	248.64	7,076.59	-353.15	-902.86	-348.26	0.00	0.00	0.00	
7,300.00	15.21	248.64	7,173.08	-362.70	-927.28	-357.68	0.00	0.00	0.00	
7,400.00	15.21	248.64	7,269.58	-372.25	-951.71	-367.10	0.00	0.00	0.00	
7,500.00	15.21	248.64	7,366.08	-381.81	-976.14	-376.52	0.00	0.00	0.00	
7,544.68	15.21	248.64	7,409.20	-386.08	-987.05	-380.73	0.00	0.00	0.00	
Brushy Canyon										
7,600.00	15.21	248.64	7,462.58	-391.36	-1,000.57	-385.94	0.00	0.00	0.00	
7,700.00	15.21	248.64	7,559.08	-400.92	-1,024.99	-395.37	0.00	0.00	0.00	
7,800.00	15.21	248.64	7,655.58	-410.47	-1,049.42	-404.79	0.00	0.00	0.00	
7,881.89	15.21	248.64	7,734.60	-418.30	-1,069.42	-412.50	0.00	0.00	0.00	
Bone Spring										
7,900.00	15.21	248.64	7,752.08	-420.03	-1,073.85	-414.21	0.00	0.00	0.00	
7,941.48	15.21	248.64	7,792.10	-423.99	-1,083.98	-418.12	0.00	0.00	0.00	
Upper Avalon										
8,000.00	15.21	248.64	7,848.58	-429.58	-1,098.27	-423.63	0.00	0.00	0.00	
8,100.00	15.21	248.64	7,945.08	-439.14	-1,122.70	-433.06	0.00	0.00	0.00	
8,154.97	15.21	248.64	7,998.12	-444.39	-1,136.13	-438.23	0.00	0.00	0.00	
Begin 1.50°/100' Drop										
8,200.00	14.53	248.64	8,041.64	-448.60	-1,146.89	-442.39	1.50	-1.50	0.00	
8,300.00	13.03	248.64	8,138.76	-457.27	-1,169.07	-450.94	1.50	-1.50	0.00	
8,363.05	12.08	248.64	8,200.30	-462.27	-1,181.84	-455.87	1.50	-1.50	0.00	



MS Directional Planning Report



Database:	TRG_EDMConroe	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Company:	Civitas Permian Operating, LLC	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site:	Double Stamp Project	North Reference:	Grid
Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #0.0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Middle Avalon									
8,400.00	11.53	248.64	8,236.47	-465.02	-1,188.88	-458.58	1.50	-1.50	0.00
8,500.00	10.03	248.64	8,334.70	-471.84	-1,206.30	-465.30	1.50	-1.50	0.00
8,600.00	8.53	248.64	8,433.39	-477.71	-1,221.32	-471.09	1.50	-1.50	0.00
8,700.00	7.03	248.64	8,532.47	-482.64	-1,233.93	-475.96	1.50	-1.50	0.00
8,702.15	7.00	248.64	8,534.60	-482.74	-1,234.17	-476.05	1.50	-1.50	0.00
Lower Avalon									
8,800.00	5.53	248.64	8,631.86	-486.63	-1,244.11	-479.89	1.50	-1.50	0.00
8,900.00	4.03	248.64	8,731.51	-489.66	-1,251.88	-482.88	1.50	-1.50	0.00
8,929.55	3.59	248.64	8,761.00	-490.38	-1,253.70	-483.59	1.50	-1.50	0.00
1st Bone Spring Sand									
9,000.00	2.53	248.64	8,831.35	-491.75	-1,257.21	-484.94	1.50	-1.50	0.00
9,100.00	1.03	248.64	8,931.30	-492.88	-1,260.10	-486.05	1.50	-1.50	0.00
9,168.71	0.00	0.00	9,000.00	-493.10	-1,260.67	-486.28	1.50	-1.50	0.00
Begin Vertical Hold									
9,200.00	0.00	0.00	9,031.29	-493.10	-1,260.67	-486.28	0.00	0.00	0.00
9,261.01	0.00	0.00	9,092.30	-493.10	-1,260.67	-486.28	0.00	0.00	0.00
2nd Bone Spring Carb									
9,300.00	0.00	0.00	9,131.29	-493.10	-1,260.67	-486.28	0.00	0.00	0.00
9,322.71	0.00	0.00	9,154.00	-493.10	-1,260.67	-486.28	0.00	0.00	0.00
Begin 10.00°/100' Build									
9,350.00	2.73	352.10	9,181.28	-492.46	-1,260.76	-485.63	10.00	10.00	0.00
9,400.00	7.73	352.10	9,231.06	-487.95	-1,261.39	-481.12	10.00	10.00	0.00
9,450.00	12.73	352.10	9,280.25	-479.15	-1,262.61	-472.32	10.00	10.00	0.00
9,500.00	17.73	352.10	9,328.48	-466.15	-1,264.41	-459.30	10.00	10.00	0.00
9,550.00	22.73	352.10	9,375.38	-449.03	-1,266.79	-442.17	10.00	10.00	0.00
9,600.00	27.73	352.10	9,420.59	-427.93	-1,269.72	-421.05	10.00	10.00	0.00
9,650.00	32.73	352.10	9,463.78	-403.00	-1,273.18	-396.11	10.00	10.00	0.00
9,700.00	37.73	352.10	9,504.61	-374.44	-1,277.14	-367.53	10.00	10.00	0.00
9,742.87	42.02	352.10	9,537.50	-347.23	-1,280.92	-340.29	10.00	10.00	0.00
2nd Bone Spring Sand									
9,750.00	42.73	352.10	9,542.77	-342.47	-1,281.58	-335.53	10.00	10.00	0.00
9,800.00	47.73	352.10	9,577.97	-307.32	-1,286.45	-300.35	10.00	10.00	0.00
9,850.00	52.73	352.10	9,609.95	-269.26	-1,291.73	-262.27	10.00	10.00	0.00
9,900.00	57.73	352.10	9,638.46	-228.59	-1,297.38	-221.57	10.00	10.00	0.00
9,950.00	62.73	352.10	9,663.27	-185.62	-1,303.34	-178.56	10.00	10.00	0.00
10,000.00	67.73	352.10	9,684.22	-140.66	-1,309.58	-133.58	10.00	10.00	0.00
10,050.00	72.73	352.10	9,701.12	-94.07	-1,316.04	-86.95	10.00	10.00	0.00
10,100.00	77.73	352.10	9,713.87	-46.20	-1,322.69	-39.04	10.00	10.00	0.00
10,150.00	82.73	352.10	9,722.35	2.59	-1,329.46	9.78	10.00	10.00	0.00
10,200.00	87.73	352.10	9,726.51	51.93	-1,336.30	59.16	10.00	10.00	0.00
10,224.71	90.20	352.10	9,726.95	76.40	-1,339.70	83.65	10.00	10.00	0.00
Hold 90.20° Inc, Begin 2°/100' Turn									
10,300.00	90.20	353.61	9,726.69	151.10	-1,349.07	158.40	2.00	0.00	2.00
10,400.00	90.20	355.61	9,726.34	250.65	-1,358.47	258.00	2.00	0.00	2.00
10,500.00	90.20	357.61	9,725.98	350.47	-1,364.39	357.85	2.00	0.00	2.00
10,604.32	90.20	359.69	9,725.61	454.76	-1,366.85	462.15	2.00	0.00	2.00
Hold 359.69° Azm									
10,700.00	90.20	359.69	9,725.27	550.44	-1,367.36	557.83	0.00	0.00	0.00
10,800.00	90.20	359.69	9,724.91	650.43	-1,367.90	657.82	0.00	0.00	0.00
10,900.00	90.20	359.69	9,724.56	750.43	-1,368.43	757.82	0.00	0.00	0.00
11,000.00	90.20	359.69	9,724.20	850.43	-1,368.97	857.82	0.00	0.00	0.00
11,100.00	90.20	359.69	9,723.84	950.43	-1,369.51	957.82	0.00	0.00	0.00



MS Directional Planning Report



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Company:	Civitas Permian Operating, LLC	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site:	Double Stamp Project	North Reference:	Grid
Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #0.0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,200.00	90.20	359.69	9,723.48	1,050.42	-1,370.05	1,057.82	0.00	0.00	0.00
11,300.00	90.20	359.69	9,723.13	1,150.42	-1,370.58	1,157.82	0.00	0.00	0.00
11,400.00	90.20	359.69	9,722.77	1,250.42	-1,371.12	1,257.82	0.00	0.00	0.00
11,500.00	90.20	359.69	9,722.41	1,350.42	-1,371.66	1,357.82	0.00	0.00	0.00
11,600.00	90.20	359.69	9,722.06	1,450.42	-1,372.19	1,457.82	0.00	0.00	0.00
11,700.00	90.20	359.69	9,721.70	1,550.41	-1,372.73	1,557.82	0.00	0.00	0.00
11,800.00	90.20	359.69	9,721.34	1,650.41	-1,373.27	1,657.82	0.00	0.00	0.00
11,900.00	90.20	359.69	9,720.98	1,750.41	-1,373.80	1,757.82	0.00	0.00	0.00
12,000.00	90.20	359.69	9,720.63	1,850.41	-1,374.34	1,857.82	0.00	0.00	0.00
12,100.00	90.20	359.69	9,720.27	1,950.41	-1,374.88	1,957.82	0.00	0.00	0.00
12,200.00	90.20	359.69	9,719.91	2,050.40	-1,375.42	2,057.82	0.00	0.00	0.00
12,300.00	90.20	359.69	9,719.55	2,150.40	-1,375.95	2,157.81	0.00	0.00	0.00
12,400.00	90.20	359.69	9,719.20	2,250.40	-1,376.49	2,257.81	0.00	0.00	0.00
12,500.00	90.20	359.69	9,718.84	2,350.40	-1,377.03	2,357.81	0.00	0.00	0.00
12,600.00	90.20	359.69	9,718.48	2,450.40	-1,377.56	2,457.81	0.00	0.00	0.00
12,700.00	90.20	359.69	9,718.13	2,550.39	-1,378.10	2,557.81	0.00	0.00	0.00
12,800.00	90.20	359.69	9,717.77	2,650.39	-1,378.64	2,657.81	0.00	0.00	0.00
12,900.00	90.20	359.69	9,717.41	2,750.39	-1,379.18	2,757.81	0.00	0.00	0.00
13,000.00	90.20	359.69	9,717.05	2,850.39	-1,379.71	2,857.81	0.00	0.00	0.00
13,100.00	90.20	359.69	9,716.70	2,950.39	-1,380.25	2,957.81	0.00	0.00	0.00
13,200.00	90.20	359.69	9,716.34	3,050.38	-1,380.79	3,057.81	0.00	0.00	0.00
13,300.00	90.20	359.69	9,715.98	3,150.38	-1,381.32	3,157.81	0.00	0.00	0.00
13,400.00	90.20	359.69	9,715.62	3,250.38	-1,381.86	3,257.81	0.00	0.00	0.00
13,500.00	90.20	359.69	9,715.27	3,350.38	-1,382.40	3,357.81	0.00	0.00	0.00
13,600.00	90.20	359.69	9,714.91	3,450.37	-1,382.93	3,457.81	0.00	0.00	0.00
13,700.00	90.20	359.69	9,714.55	3,550.37	-1,383.47	3,557.81	0.00	0.00	0.00
13,800.00	90.20	359.69	9,714.20	3,650.37	-1,384.01	3,657.81	0.00	0.00	0.00
13,900.00	90.20	359.69	9,713.84	3,750.37	-1,384.55	3,757.80	0.00	0.00	0.00
14,000.00	90.20	359.69	9,713.48	3,850.37	-1,385.08	3,857.80	0.00	0.00	0.00
14,100.00	90.20	359.69	9,713.12	3,950.36	-1,385.62	3,957.80	0.00	0.00	0.00
14,200.00	90.20	359.69	9,712.77	4,050.36	-1,386.16	4,057.80	0.00	0.00	0.00
14,300.00	90.20	359.69	9,712.41	4,150.36	-1,386.69	4,157.80	0.00	0.00	0.00
14,400.00	90.20	359.69	9,712.05	4,250.36	-1,387.23	4,257.80	0.00	0.00	0.00
14,500.00	90.20	359.69	9,711.70	4,350.36	-1,387.77	4,357.80	0.00	0.00	0.00
14,600.00	90.20	359.69	9,711.34	4,450.35	-1,388.31	4,457.80	0.00	0.00	0.00
14,700.00	90.20	359.69	9,710.98	4,550.35	-1,388.84	4,557.80	0.00	0.00	0.00
14,800.00	90.20	359.69	9,710.62	4,650.35	-1,389.38	4,657.80	0.00	0.00	0.00
14,900.00	90.20	359.69	9,710.27	4,750.35	-1,389.92	4,757.80	0.00	0.00	0.00
15,000.00	90.20	359.69	9,709.91	4,850.35	-1,390.45	4,857.80	0.00	0.00	0.00
15,100.00	90.20	359.69	9,709.55	4,950.34	-1,390.99	4,957.80	0.00	0.00	0.00
15,200.00	90.20	359.69	9,709.19	5,050.34	-1,391.53	5,057.80	0.00	0.00	0.00
15,300.00	90.20	359.69	9,708.84	5,150.34	-1,392.06	5,157.80	0.00	0.00	0.00
15,400.00	90.20	359.69	9,708.48	5,250.34	-1,392.60	5,257.80	0.00	0.00	0.00
15,500.00	90.20	359.69	9,708.12	5,350.34	-1,393.14	5,357.79	0.00	0.00	0.00
15,600.00	90.20	359.69	9,707.77	5,450.33	-1,393.68	5,457.79	0.00	0.00	0.00
15,700.00	90.20	359.69	9,707.41	5,550.33	-1,394.21	5,557.79	0.00	0.00	0.00
15,800.00	90.20	359.69	9,707.05	5,650.33	-1,394.75	5,657.79	0.00	0.00	0.00
15,900.00	90.20	359.69	9,706.69	5,750.33	-1,395.29	5,757.79	0.00	0.00	0.00
16,000.00	90.20	359.69	9,706.34	5,850.32	-1,395.82	5,857.79	0.00	0.00	0.00
16,100.00	90.20	359.69	9,705.98	5,950.32	-1,396.36	5,957.79	0.00	0.00	0.00
16,200.00	90.20	359.69	9,705.62	6,050.32	-1,396.90	6,057.79	0.00	0.00	0.00
16,300.00	90.20	359.69	9,705.27	6,150.32	-1,397.44	6,157.79	0.00	0.00	0.00
16,400.00	90.20	359.69	9,704.91	6,250.32	-1,397.97	6,257.79	0.00	0.00	0.00
16,500.00	90.20	359.69	9,704.55	6,350.31	-1,398.51	6,357.79	0.00	0.00	0.00


MS Directional
 Planning Report


Database:	TRG_EDMConroe	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Company:	Civitas Permian Operating, LLC	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site:	Double Stamp Project	North Reference:	Grid
Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #0.0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,600.00	90.20	359.69	9,704.19	6,450.31	-1,399.05	6,457.79	0.00	0.00	0.00
16,700.00	90.20	359.69	9,703.84	6,550.31	-1,399.58	6,557.79	0.00	0.00	0.00
16,800.00	90.20	359.69	9,703.48	6,650.31	-1,400.12	6,657.79	0.00	0.00	0.00
16,900.00	90.20	359.69	9,703.12	6,750.31	-1,400.66	6,757.79	0.00	0.00	0.00
17,000.00	90.20	359.69	9,702.76	6,850.30	-1,401.20	6,857.79	0.00	0.00	0.00
17,100.00	90.20	359.69	9,702.41	6,950.30	-1,401.73	6,957.78	0.00	0.00	0.00
17,200.00	90.20	359.69	9,702.05	7,050.30	-1,402.27	7,057.78	0.00	0.00	0.00
17,300.00	90.20	359.69	9,701.69	7,150.30	-1,402.81	7,157.78	0.00	0.00	0.00
17,400.00	90.20	359.69	9,701.34	7,250.30	-1,403.34	7,257.78	0.00	0.00	0.00
17,500.00	90.20	359.69	9,700.98	7,350.29	-1,403.88	7,357.78	0.00	0.00	0.00
17,600.00	90.20	359.69	9,700.62	7,450.29	-1,404.42	7,457.78	0.00	0.00	0.00
17,700.00	90.20	359.69	9,700.26	7,550.29	-1,404.95	7,557.78	0.00	0.00	0.00
17,800.00	90.20	359.69	9,699.91	7,650.29	-1,405.49	7,657.78	0.00	0.00	0.00
17,900.00	90.20	359.69	9,699.55	7,750.29	-1,406.03	7,757.78	0.00	0.00	0.00
18,000.00	90.20	359.69	9,699.19	7,850.28	-1,406.57	7,857.78	0.00	0.00	0.00
18,100.00	90.20	359.69	9,698.83	7,950.28	-1,407.10	7,957.78	0.00	0.00	0.00
18,200.00	90.20	359.69	9,698.48	8,050.28	-1,407.64	8,057.78	0.00	0.00	0.00
18,300.00	90.20	359.69	9,698.12	8,150.28	-1,408.18	8,157.78	0.00	0.00	0.00
18,400.00	90.20	359.69	9,697.76	8,250.28	-1,408.71	8,257.78	0.00	0.00	0.00
18,500.00	90.20	359.69	9,697.41	8,350.27	-1,409.25	8,357.78	0.00	0.00	0.00
18,600.00	90.20	359.69	9,697.05	8,450.27	-1,409.79	8,457.77	0.00	0.00	0.00
18,700.00	90.20	359.69	9,696.69	8,550.27	-1,410.33	8,557.77	0.00	0.00	0.00
18,800.00	90.20	359.69	9,696.33	8,650.27	-1,410.86	8,657.77	0.00	0.00	0.00
18,900.00	90.20	359.69	9,695.98	8,750.26	-1,411.40	8,757.77	0.00	0.00	0.00
19,000.00	90.20	359.69	9,695.62	8,850.26	-1,411.94	8,857.77	0.00	0.00	0.00
19,100.00	90.20	359.69	9,695.26	8,950.26	-1,412.47	8,957.77	0.00	0.00	0.00
19,200.00	90.20	359.69	9,694.91	9,050.26	-1,413.01	9,057.77	0.00	0.00	0.00
19,300.00	90.20	359.69	9,694.55	9,150.26	-1,413.55	9,157.77	0.00	0.00	0.00
19,400.00	90.20	359.69	9,694.19	9,250.25	-1,414.08	9,257.77	0.00	0.00	0.00
19,500.00	90.20	359.69	9,693.83	9,350.25	-1,414.62	9,357.77	0.00	0.00	0.00
19,600.00	90.20	359.69	9,693.48	9,450.25	-1,415.16	9,457.77	0.00	0.00	0.00
19,700.00	90.20	359.69	9,693.12	9,550.25	-1,415.70	9,557.77	0.00	0.00	0.00
19,800.00	90.20	359.69	9,692.76	9,650.25	-1,416.23	9,657.77	0.00	0.00	0.00
19,900.00	90.20	359.69	9,692.40	9,750.24	-1,416.77	9,757.77	0.00	0.00	0.00
20,000.00	90.20	359.69	9,692.05	9,850.24	-1,417.31	9,857.77	0.00	0.00	0.00
20,100.00	90.20	359.69	9,691.69	9,950.24	-1,417.84	9,957.77	0.00	0.00	0.00
20,150.35	90.20	359.69	9,691.51	10,000.59	-1,418.11	10,008.11	0.00	0.00	0.00
PBHL									



MS Directional Planning Report



Database:	TRG_EDMConroe	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Company:	Civitas Permian Operating, LLC	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Project:	Lea County, New Mexico (NAD 83)	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site:	Double Stamp Project	North Reference:	Grid
Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #0.0		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
KOP - Double Stamp - plan hits target center - Point	0.00	0.00	9,154.00	-493.10	-1,260.67	570,180.90	722,872.32	32.566102	-103.744070
FTP - Double Stamp F - plan misses target center by 94.63usft at 9542.67usft MD (9368.59 TVD, -451.79 N, -1266.41 E) - Point	0.00	0.00	9,364.41	-453.45	-1,360.93	570,220.55	722,772.07	32.566212	-103.744395
PBHL - Double Stamp - plan hits target center - Point	0.00	0.00	9,691.51	10,000.59	-1,418.11	580,674.59	722,714.88	32.594947	-103.744392

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,495.70	1,495.70	Rustler				
1,756.00	1,756.00	Salado				
2,921.00	2,921.00	Yates				
3,561.52	3,559.50	Capitan Reef Complex				
4,665.37	4,630.70	DMG				
7,544.68	7,409.20	Brushy Canyon				
7,881.89	7,734.60	Bone Spring				
7,941.48	7,792.10	Upper Avalon				
8,363.05	8,200.30	Middle Avalon				
8,702.15	8,534.60	Lower Avalon				
8,929.55	8,761.00	1st Bone Spring Sand				
9,261.01	9,092.30	2nd Bone Spring Carb				
9,742.87	9,537.50	2nd Bone Spring Sand				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,000.00	3,000.00	0.00	0.00	KOP, 1.50°/100' Build
4,013.74	4,001.88	-48.72	-124.55	Hold 15.21° Inc, 248.64° Azm
8,154.97	7,998.12	-444.39	-1,136.13	Begin 1.50°/100' Drop
9,168.71	9,000.00	-493.10	-1,260.67	Begin Vertical Hold
9,322.71	9,154.00	-493.10	-1,260.67	Begin 10.00°/100' Build
10,224.71	9,726.95	76.40	-1,339.70	Hold 90.20° Inc, Begin 2°/100' Turn
10,604.32	9,725.61	454.76	-1,366.85	Hold 359.69° Azm
20,150.35	9,691.51	10,000.59	-1,418.11	PBHL



CIVITAS

Civitas Permian Operating, LLC

**Lea County, New Mexico (NAD 83)
Double Stamp Project
Double Stamp Fed Com 122H**

**Wellbore #1
Design #0.0**

Anticollision Report

10 January, 2025





MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Reference	Design #0.0
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 2,000.00usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	1/10/2025		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	20,150.35	Design #0.0 (Wellbore #1)	MWD+IFR1+SAG+FDIR	OWSG MWD + IFR1 + Sag + FDIR Correction	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Double Stamp - Offsets (NAD 83)						
Belco AIA Federal 2H - Wellbore #1 - Mock Surveys (from	5,000.00	4,887.34	302.65	268.36	8.825	SF
Belco AIA Federal 2H - Wellbore #1 - Mock Surveys (from	5,019.00	4,898.39	302.34	268.08	8.826	CC, ES
Belco AIA Federal 2H - Wellbore #1 - Surveys	5,018.04	4,897.00	302.30	282.33	15.135	CC, ES
Belco AIA Federal 2H - Wellbore #1 - Surveys	5,100.00	4,939.95	308.44	287.92	15.034	SF
Belco AIA Federal 3H - Wellbore #1 - Surveys						Out of range
Belco AIA Federal 4H - Wellbore #1 - Surveys	5,031.12	4,999.06	69.20	37.32	2.171	CC, ES, SF
Queenie 15 1H - Wellbore #1 - Surveys	4,064.73	3,841.00	888.39	864.49	37.176	CC, ES
Queenie 15 1H - Wellbore #1 - Surveys	4,100.00	3,859.90	888.53	864.53	37.030	SF
Double Stamp E2-1 (113H,116H,123H,124H,126H)						
Double Stamp Fed Com 113H - Wellbore #1 - Design #1	1,165.99	1,167.99	1,084.52	1,076.34	132.636	CC
Double Stamp Fed Com 113H - Wellbore #1 - Design #1	1,300.00	1,293.98	1,084.89	1,075.80	119.317	ES
Double Stamp Fed Com 113H - Wellbore #1 - Design #1	6,200.00	6,021.37	1,987.59	1,944.68	46.323	SF
Double Stamp Fed Com 116H - Wellbore #1 - Design #1	1,765.99	1,767.99	1,109.51	1,097.03	88.915	CC
Double Stamp Fed Com 116H - Wellbore #1 - Design #1	1,800.00	1,800.00	1,109.51	1,096.80	87.260	ES
Double Stamp Fed Com 116H - Wellbore #1 - Design #1	3,500.00	3,141.30	1,407.76	1,385.12	62.174	SF
Double Stamp Fed Com 123H - Wellbore #1 - Design #1	1,165.99	1,167.99	1,084.23	1,076.05	132.600	CC
Double Stamp Fed Com 123H - Wellbore #1 - Design #1	1,300.00	1,296.54	1,084.48	1,075.38	119.165	ES
Double Stamp Fed Com 123H - Wellbore #1 - Design #1	6,500.00	6,414.08	1,976.58	1,931.04	43.405	SF
Double Stamp Fed Com 124H - Wellbore #1 - Design #1	1,165.99	1,167.99	1,189.23	1,181.05	145.442	CC
Double Stamp Fed Com 124H - Wellbore #1 - Design #1	1,200.00	1,200.00	1,189.23	1,180.81	141.351	ES
Double Stamp Fed Com 124H - Wellbore #1 - Design #1	4,700.00	4,353.52	1,975.96	1,944.65	63.110	SF
Double Stamp Fed Com 126H - Wellbore #1 - Design #1	465.99	467.99	1,109.23	1,106.07	351.239	CC
Double Stamp Fed Com 126H - Wellbore #1 - Design #1	600.00	588.82	1,109.83	1,105.77	273.414	ES
Double Stamp Fed Com 126H - Wellbore #1 - Design #1	3,900.00	3,458.62	1,901.51	1,876.10	74.839	SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation


MS Directional
 Anticollision Report


Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Double Stamp W2-1 (111H,115H,121H,125H)						
Double Stamp Fed Com 111H - Wellbore #1 - Design #1	800.00	800.00	108.06	102.51	19.485	CC
Double Stamp Fed Com 111H - Wellbore #1 - Design #1	8,704.45	8,696.54	132.35	70.03	2.124	ES, SF
Double Stamp Fed Com 115H - Wellbore #1 - Design #1	2,093.27	2,094.34	78.08	63.42	5.324	CC
Double Stamp Fed Com 115H - Wellbore #1 - Design #1	2,100.00	2,101.03	78.09	63.37	5.307	ES
Double Stamp Fed Com 115H - Wellbore #1 - Design #1	2,400.00	2,399.38	84.41	67.61	5.024	SF
Double Stamp Fed Com 121H - Wellbore #1 - Design #1	1,608.40	1,610.53	91.23	80.00	8.129	CC
Double Stamp Fed Com 121H - Wellbore #1 - Design #1	1,700.00	1,701.68	91.68	79.81	7.721	ES
Double Stamp Fed Com 121H - Wellbore #1 - Design #1	2,100.00	2,099.70	103.48	88.77	7.033	SF
Double Stamp Fed Com 125H - Wellbore #1 - Design #1	1,200.00	1,200.00	80.11	71.70	9.522	CC
Double Stamp Fed Com 125H - Wellbore #1 - Design #1	1,300.00	1,298.93	80.78	71.67	8.866	ES
Double Stamp Fed Com 125H - Wellbore #1 - Design #1	20,150.35	20,035.18	659.37	468.58	3.456	SF

Offset Design: Double Stamp - Offsets (NAD 83) - Belco AIA Federal 2H - Wellbore #1 - Mock Surveys (from Surface)

Survey Program: 0-MWD										Offset Site Error: 0.00 usft				
Reference Offset				Semi Major Axis		Offset Wellbore Centre			Rule Assigned: Distance				Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-107.840	-222.56	-691.52	726.90					
100.00	100.00	75.15	75.15	0.26	0.13	-107.840	-222.55	-691.49	726.42	726.02	0.40	1,824.097		
200.00	200.00	176.03	176.03	0.62	0.45	-107.841	-222.51	-691.34	726.27	725.20	1.07	676.388		
300.00	300.00	276.90	276.90	0.98	0.81	-107.841	-222.43	-691.08	726.00	724.20	1.79	404.719		
400.00	400.00	377.77	377.77	1.34	1.18	-107.842	-222.32	-690.70	725.61	723.09	2.51	288.636		
500.00	500.00	478.64	478.64	1.70	1.54	-107.843	-222.17	-690.21	725.10	721.86	3.23	224.210		
600.00	600.00	579.52	579.51	2.06	1.90	-107.844	-221.99	-689.60	724.47	720.51	3.95	183.220		
700.00	700.00	680.38	680.38	2.41	2.26	-107.845	-221.78	-688.87	723.71	719.04	4.67	154.833		
800.00	800.00	781.25	781.24	2.77	2.62	-107.847	-221.53	-688.03	722.84	717.45	5.39	134.003		
900.00	900.00	882.12	882.10	3.13	2.98	-107.849	-221.24	-687.07	721.85	715.73	6.11	118.060		
1,000.00	1,000.00	982.98	982.96	3.49	3.35	-107.851	-220.92	-685.99	720.74	713.90	6.83	105.459		
1,100.00	1,100.00	1,083.84	1,083.81	3.85	3.71	-107.853	-220.57	-684.80	719.50	711.95	7.55	95.244		
1,200.00	1,200.00	1,184.69	1,184.65	4.21	4.07	-107.856	-220.18	-683.49	718.15	709.87	8.27	86.792		
1,300.00	1,300.00	1,285.55	1,285.50	4.57	4.43	-107.859	-219.76	-682.06	716.67	707.68	8.99	79.681		
1,400.00	1,400.00	1,386.40	1,386.33	4.92	4.79	-107.862	-219.30	-680.52	715.08	705.37	9.71	73.611		
1,500.00	1,500.00	1,487.24	1,487.16	5.28	5.16	-107.865	-218.81	-678.86	713.37	702.93	10.43	68.368		
1,600.00	1,600.00	1,588.08	1,587.99	5.64	5.52	-107.869	-218.29	-677.09	711.53	700.38	11.15	63.790		
1,700.00	1,700.00	1,688.92	1,688.80	6.00	5.88	-107.873	-217.73	-675.19	709.57	697.70	11.87	59.758		
1,800.00	1,800.00	1,789.75	1,789.61	6.36	6.24	-107.877	-217.13	-673.19	707.50	694.91	12.59	56.177		
1,900.00	1,900.00	1,890.57	1,890.41	6.72	6.61	-107.881	-216.50	-671.06	705.30	691.99	13.31	52.975		
2,000.00	2,000.00	1,991.39	1,991.21	7.07	6.97	-107.886	-215.84	-668.82	702.99	688.95	14.03	50.093		
2,100.00	2,100.00	2,091.96	2,091.74	7.43	7.33	-107.890	-215.14	-666.48	700.55	685.80	14.75	47.486		
2,200.00	2,200.00	2,191.13	2,190.88	7.79	7.69	-107.894	-214.45	-664.19	698.15	682.68	15.47	45.138		
2,300.00	2,300.00	2,290.30	2,290.03	8.15	8.04	-107.895	-213.76	-662.03	695.86	679.68	16.18	43.003		
2,400.00	2,400.00	2,389.48	2,389.19	8.51	8.40	-107.893	-213.08	-659.98	693.68	676.79	16.90	41.056		
2,500.00	2,500.00	2,488.67	2,488.35	8.87	8.76	-107.889	-212.41	-658.05	691.62	674.01	17.61	39.274		
2,600.00	2,600.00	2,587.86	2,587.52	9.23	9.11	-107.883	-211.74	-656.24	689.68	671.35	18.32	37.637		
2,700.00	2,700.00	2,687.05	2,686.70	9.58	9.47	-107.874	-211.08	-654.55	687.85	668.81	19.04	36.128		
2,800.00	2,800.00	2,786.25	2,785.88	9.94	9.83	-107.862	-210.43	-652.97	686.13	666.38	19.75	34.735		
2,900.00	2,900.00	2,885.45	2,885.07	10.30	10.18	-107.848	-209.78	-651.51	684.53	664.06	20.47	33.445		
3,000.00	3,000.00	2,984.66	2,984.27	10.66	10.54	-107.832	-209.14	-650.16	683.04	661.86	21.18	32.247		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp - Offsets (NAD 83) - Belco AIA Federal 2H - Wellbore #1 - Mock Surveys (from Surface)

Survey Program: 0-MWD														Offset Site Error:	0.00 usft
Reference														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
3,100.00	3,099.99	3,083.84	3,083.43	11.01	10.89	-107.806	-208.51	-648.94	680.36	658.48	21.88	31.091			
3,200.00	3,199.91	3,182.92	3,182.51	11.34	11.25	-107.764	-207.89	-647.83	675.19	652.62	22.57	29.912			
3,300.00	3,299.69	3,281.85	3,281.44	11.68	11.60	-107.704	-207.27	-646.84	667.52	644.26	23.26	28.696			
3,400.00	3,399.27	3,380.57	3,380.15	12.02	11.96	-107.626	-206.66	-645.97	657.37	633.42	23.95	27.447			
3,500.00	3,498.57	3,479.02	3,478.59	12.36	12.31	-107.527	-206.06	-645.21	644.73	620.10	24.64	26.168			
3,600.00	3,597.54	3,577.14	3,576.71	12.70	12.66	-107.405	-205.47	-644.58	629.63	604.31	25.32	24.864			
3,700.00	3,696.09	3,674.86	3,674.43	13.04	13.01	-107.259	-204.88	-644.06	612.06	586.06	26.01	23.536			
3,800.00	3,794.16	3,772.14	3,771.71	13.39	13.35	-107.082	-204.31	-643.66	592.05	565.36	26.68	22.188			
3,900.00	3,891.70	3,868.91	3,868.47	13.74	13.70	-106.871	-203.75	-643.37	569.60	542.24	27.36	20.821			
4,000.00	3,988.62	3,965.11	3,964.67	14.09	14.03	-106.617	-203.19	-643.19	544.73	516.70	28.02	19.438			
4,100.00	4,085.12	4,060.95	4,060.51	14.44	14.37	-106.322	-202.64	-643.12	518.40	489.71	28.69	18.071			
4,200.00	4,181.62	4,156.84	4,156.40	14.80	14.70	-105.992	-202.10	-643.16	492.17	462.82	29.35	16.771			
4,300.00	4,278.12	4,252.79	4,252.35	15.16	15.03	-105.622	-201.57	-643.32	466.06	436.05	30.01	15.532			
4,400.00	4,374.62	4,348.79	4,348.35	15.52	15.36	-105.205	-201.04	-643.58	440.09	409.42	30.67	14.351			
4,500.00	4,471.12	4,444.86	4,444.42	15.89	15.69	-104.733	-200.52	-643.95	414.24	382.92	31.32	13.224			
4,600.00	4,567.62	4,549.08	4,548.42	16.26	16.05	-103.522	-195.33	-644.48	387.52	355.52	32.01	12.108			
4,700.00	4,664.11	4,646.58	4,643.56	16.63	16.39	-99.643	-174.58	-647.08	360.02	327.34	32.69	11.014			
4,800.00	4,760.61	4,738.90	4,731.57	17.00	16.70	-93.962	-146.93	-650.00	334.21	300.82	33.39	10.010			
4,900.00	4,857.11	4,821.63	4,809.29	17.37	17.01	-87.324	-118.80	-653.30	313.40	279.36	34.04	9.208			
5,000.00	4,953.61	4,887.34	4,869.27	17.75	17.26	-80.212	-92.48	-658.02	302.65	268.36	34.29	8.825 SF			
5,019.00	4,971.95	4,898.39	4,878.96	17.82	17.30	-78.757	-87.30	-659.16	302.34	268.08	34.26	8.826 CC, ES			
5,100.00	5,050.11	4,940.05	4,914.03	18.12	17.47	-72.412	-65.48	-664.43	308.51	274.87	33.64	9.171			
5,200.00	5,146.61	4,984.70	4,948.90	18.50	17.66	-64.445	-38.73	-672.23	333.75	301.69	32.06	10.411			
5,300.00	5,243.11	5,029.64	4,981.10	18.88	17.86	-56.115	-8.74	-681.26	375.87	345.55	30.32	12.396			
5,400.00	5,339.61	5,067.70	5,006.16	19.26	18.04	-48.397	18.95	-688.54	430.89	402.34	28.55	15.091			
5,500.00	5,436.11	5,095.35	5,022.80	19.65	18.18	-41.723	40.41	-693.69	496.28	469.49	26.79	18.526			
5,600.00	5,532.60	5,119.00	5,035.80	20.03	18.30	-35.612	59.65	-698.19	569.51	544.15	25.37	22.452			
5,700.00	5,629.10	5,130.00	5,041.34	20.41	18.36	-30.470	68.88	-700.43	648.62	624.69	23.93	27.109			
5,800.00	5,725.60	5,140.00	5,045.98	20.80	18.42	-25.527	77.46	-702.64	732.18	709.31	22.87	32.016			
5,900.00	5,822.10	5,149.00	5,049.82	21.19	18.47	-20.815	85.32	-704.78	818.97	796.87	22.10	37.057			
6,000.00	5,918.60	5,150.00	5,050.23	21.58	18.47	-16.356	86.20	-705.02	908.26	886.90	21.36	42.521			
6,100.00	6,015.10	5,164.36	5,055.68	21.96	18.55	-12.109	98.99	-708.61	999.09	977.93	21.15	47.229			
6,200.00	6,111.60	5,175.00	5,059.25	22.35	18.61	-8.199	108.62	-711.35	1,091.47	1,070.50	20.97	52.045			
6,300.00	6,208.10	5,175.00	5,059.25	22.74	18.61	-4.313	108.62	-711.35	1,184.87	1,164.20	20.67	57.325			
6,400.00	6,304.59	5,180.00	5,060.79	23.14	18.64	-0.767	113.20	-712.66	1,279.19	1,258.63	20.56	62.218			
6,500.00	6,401.09	5,191.92	5,064.27	23.53	18.71	2.239	124.15	-715.82	1,374.14	1,353.51	20.63	66.605			
6,600.00	6,497.59	5,200.00	5,066.53	23.92	18.76	5.121	131.60	-717.99	1,469.61	1,448.93	20.68	71.073			
6,700.00	6,594.09	5,212.00	5,069.76	24.32	18.84	7.561	142.69	-721.25	1,565.50	1,544.69	20.82	75.205			
6,800.00	6,690.59	5,212.00	5,069.76	24.71	18.84	10.389	142.69	-721.25	1,661.79	1,640.98	20.81	79.850			
6,900.00	6,787.09	5,225.00	5,072.97	25.10	18.92	12.330	154.77	-724.82	1,758.43	1,737.42	21.01	83.691			
7,000.00	6,883.59	5,225.00	5,072.97	25.50	18.92	14.804	154.77	-724.82	1,855.33	1,834.27	21.06	88.087			
7,100.00	6,980.09	5,225.00	5,072.97	25.90	18.92	17.131	154.77	-724.82	1,952.54	1,931.40	21.14	92.360			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp - Offsets (NAD 83) - Belco AIA Federal 2H - Wellbore #1 - Surveys

Survey Program: 4477-MWD													Offset Site Error: 0.00 usft
Reference													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,700.00	2,700.00	4,467.00	4,466.74	9.58	0.00	-107.284	-200.40	-644.05	1,914.96	1,909.95	5.01	382.175	
2,800.00	2,800.00	4,467.00	4,466.74	9.94	0.00	-107.284	-200.40	-644.05	1,821.71	1,816.44	5.27	345.375	
2,900.00	2,900.00	4,467.00	4,466.74	10.30	0.00	-107.284	-200.40	-644.05	1,729.22	1,723.65	5.56	310.809	
3,000.00	3,000.00	4,467.00	4,466.74	10.66	0.00	-107.284	-200.40	-644.05	1,637.60	1,631.72	5.88	278.432	
3,100.00	3,099.99	4,467.00	4,466.74	11.01	0.00	-107.276	-200.40	-644.05	1,546.47	1,540.24	6.23	248.413	
3,200.00	3,199.91	4,467.00	4,466.74	11.34	0.00	-107.252	-200.40	-644.05	1,455.36	1,448.77	6.59	220.851	
3,300.00	3,299.69	4,467.00	4,466.74	11.68	0.00	-107.211	-200.40	-644.05	1,364.34	1,357.36	6.98	195.558	
3,400.00	3,399.27	4,467.00	4,466.74	12.02	0.00	-107.153	-200.40	-644.05	1,273.51	1,266.12	7.39	172.342	
3,500.00	3,498.57	4,467.00	4,466.74	12.36	0.00	-107.076	-200.40	-644.05	1,182.98	1,175.14	7.83	151.031	
3,600.00	3,597.54	4,467.00	4,466.74	12.70	0.00	-106.978	-200.40	-644.05	1,092.88	1,084.57	8.31	131.480	
3,700.00	3,696.09	4,467.00	4,466.74	13.04	0.00	-106.857	-200.40	-644.05	1,003.42	994.58	8.84	113.569	
3,800.00	3,794.16	4,467.00	4,466.74	13.39	0.00	-106.709	-200.40	-644.05	914.83	905.42	9.41	97.200	
3,900.00	3,891.70	4,467.00	4,466.74	13.74	0.00	-106.528	-200.40	-644.05	827.49	817.44	10.05	82.304	
4,000.00	3,988.62	4,467.00	4,466.74	14.09	0.00	-106.310	-200.40	-644.05	741.89	731.12	10.78	68.844	
4,100.00	4,085.12	4,467.00	4,466.74	14.44	0.00	-106.055	-200.40	-644.05	659.36	647.76	11.60	56.820	
4,200.00	4,181.62	4,467.00	4,466.74	14.80	0.00	-105.773	-200.40	-644.05	582.32	569.75	12.57	46.341	
4,300.00	4,278.12	4,467.00	4,466.74	15.16	0.00	-105.459	-200.40	-644.05	513.25	499.61	13.64	37.616	
4,400.00	4,374.62	4,467.00	4,466.74	15.52	0.00	-105.108	-200.40	-644.05	455.81	441.07	14.74	30.927	
4,500.00	4,471.12	4,467.00	4,466.74	15.89	0.00	-104.713	-200.40	-644.05	414.85	399.24	15.60	26.587	
4,600.00	4,567.62	4,548.89	4,548.42	16.26	0.40	-103.525	-195.35	-644.48	387.53	371.25	16.28	23.808	
4,700.00	4,664.11	4,646.39	4,643.56	16.63	0.91	-99.650	-174.63	-647.08	360.03	342.96	17.06	21.099	
4,800.00	4,760.61	4,738.73	4,731.59	17.00	1.28	-93.971	-146.98	-649.99	334.21	316.25	17.96	18.610	
4,900.00	4,857.11	4,821.47	4,809.34	17.37	1.79	-87.333	-118.85	-653.29	313.39	294.48	18.90	16.578	
5,000.00	4,953.61	4,887.22	4,869.35	17.75	2.27	-80.222	-92.53	-658.01	302.62	282.79	19.83	15.263	
5,018.04	4,971.02	4,897.00	4,877.94	17.81	2.34	-78.904	-87.96	-659.01	302.30	282.33	19.97	15.135 CC, ES	
5,100.00	5,050.11	4,939.95	4,914.14	18.12	2.73	-72.421	-65.53	-664.42	308.44	287.92	20.52	15.034 SF	
5,200.00	5,146.61	4,984.61	4,949.02	18.50	3.18	-64.453	-38.78	-672.21	333.65	312.93	20.72	16.102	
5,300.00	5,243.11	5,029.55	4,981.23	18.88	3.68	-56.123	-8.80	-681.25	375.76	355.15	20.60	18.236	
5,400.00	5,339.61	5,067.63	5,006.31	19.26	4.15	-48.403	18.90	-688.53	430.76	410.48	20.28	21.237	
5,500.00	5,436.11	5,087.00	5,018.12	19.65	4.40	-42.332	33.82	-692.14	496.28	476.59	19.70	25.194	
5,600.00	5,532.60	5,119.00	5,035.99	20.03	4.83	-35.612	59.65	-698.20	569.36	549.92	19.44	29.287	
5,700.00	5,629.10	5,119.00	5,035.99	20.41	4.83	-30.972	59.65	-698.20	648.82	630.00	18.82	34.477	
5,800.00	5,725.60	5,149.00	5,050.01	20.80	5.26	-25.279	85.32	-704.78	732.24	713.45	18.79	38.974	
5,900.00	5,822.10	5,149.00	5,050.01	21.19	5.26	-20.815	85.32	-704.78	818.80	800.37	18.43	44.419	
6,000.00	5,918.60	5,149.00	5,050.01	21.58	5.26	-16.358	85.32	-704.78	908.12	889.93	18.19	49.913	
6,100.00	6,015.10	5,164.35	5,055.87	21.96	5.50	-12.109	98.98	-708.61	998.91	980.69	18.22	54.818	
6,200.00	6,111.60	5,180.00	5,060.98	22.35	5.74	-8.297	113.20	-712.66	1,091.46	1,073.16	18.30	59.653	
6,300.00	6,208.10	5,180.00	5,060.98	22.74	5.74	-4.457	113.20	-712.66	1,184.72	1,166.48	18.25	64.922	
6,400.00	6,304.59	5,180.00	5,060.98	23.14	5.74	-0.767	113.20	-712.66	1,279.01	1,260.76	18.25	70.093	
6,500.00	6,401.09	5,191.90	5,064.45	23.53	5.94	2.240	124.13	-715.82	1,373.97	1,355.57	18.39	74.706	
6,600.00	6,497.59	5,201.18	5,067.04	23.92	6.08	5.066	132.69	-718.31	1,469.43	1,450.90	18.53	79.297	
6,700.00	6,594.09	5,212.00	5,069.94	24.32	6.26	7.561	142.69	-721.25	1,565.32	1,546.63	18.70	83.712	
6,800.00	6,690.59	5,212.00	5,069.94	24.71	6.26	10.389	142.69	-721.25	1,661.61	1,642.81	18.80	88.400	
6,900.00	6,787.09	5,212.00	5,069.94	25.10	6.26	13.055	142.69	-721.25	1,758.31	1,739.39	18.91	92.968	
7,000.00	6,883.59	5,212.00	5,069.94	25.50	6.26	15.561	142.69	-721.25	1,855.36	1,836.31	19.05	97.417	
7,100.00	6,980.09	5,228.06	5,073.86	25.90	6.52	16.951	157.63	-725.66	1,952.35	1,933.04	19.31	101.126	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp - Offsets (NAD 83) - Belco AIA Federal 4H - Wellbore #1 - Surveys														Offset Site Error:	0.00 usft
Survey Program: 100-GYRO-NS, 1256-MWD														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.00	0.00	0.00	0.00	-112.206	-220.64	-540.49	584.44						
100.00	100.00	70.89	70.89	0.26	0.09	-112.189	-220.51	-540.64	583.89	583.54	0.35	1,663.168			
200.00	200.00	170.19	170.19	0.62	0.37	-112.126	-220.06	-541.23	584.26	583.27	0.99	589.180			
300.00	300.00	270.21	270.20	0.98	0.72	-112.065	-219.63	-541.83	584.66	582.96	1.70	343.900			
400.00	400.00	369.91	369.90	1.34	1.07	-112.008	-219.24	-542.43	585.07	582.66	2.41	243.066			
500.00	500.00	469.98	469.97	1.70	1.42	-111.956	-218.92	-543.05	585.52	582.41	3.12	187.949			
600.00	600.00	570.08	570.07	2.06	1.77	-111.917	-218.71	-543.59	585.94	582.12	3.82	153.234			
700.00	700.00	670.33	670.32	2.41	2.12	-111.885	-218.56	-544.08	586.34	581.81	4.53	129.352			
800.00	800.00	770.05	770.04	2.77	2.47	-111.847	-218.33	-544.58	586.72	581.48	5.24	111.967			
900.00	900.00	869.07	869.05	3.13	2.82	-111.804	-218.11	-545.19	587.21	581.27	5.95	98.774			
1,000.00	1,000.00	968.51	968.49	3.49	3.17	-111.765	-217.98	-545.94	587.86	581.21	6.65	88.379			
1,100.00	1,100.00	1,069.01	1,068.99	3.85	3.52	-111.744	-218.02	-546.64	588.52	581.16	7.36	79.940			
1,200.00	1,200.00	1,172.21	1,172.19	4.21	3.88	-111.719	-217.93	-547.10	588.91	580.83	8.08	72.880			
1,300.00	1,300.00	1,275.55	1,275.52	4.57	4.11	-111.730	-217.96	-546.86	588.70	580.03	8.67	67.903			
1,400.00	1,400.00	1,378.93	1,378.90	4.92	4.14	-111.753	-217.87	-546.03	587.92	578.87	9.06	64.909			
1,500.00	1,500.00	1,478.97	1,478.93	5.28	4.20	-111.782	-217.71	-544.81	586.73	577.25	9.47	61.928			
1,600.00	1,600.00	1,582.46	1,582.41	5.64	4.29	-111.815	-217.48	-543.31	585.31	575.38	9.92	58.978			
1,700.00	1,700.00	1,684.61	1,684.55	6.00	4.41	-111.851	-217.12	-541.45	583.49	573.09	10.40	56.096			
1,800.00	1,800.00	1,784.00	1,783.91	6.36	4.55	-111.874	-216.50	-539.26	581.21	570.31	10.90	53.318			
1,900.00	1,900.00	1,883.38	1,883.28	6.72	4.72	-111.891	-215.97	-537.49	579.36	567.93	11.42	50.710			
2,000.00	2,000.00	1,982.78	1,982.65	7.07	4.90	-111.870	-215.08	-535.82	577.46	565.50	11.97	48.253			
2,100.00	2,100.00	2,080.78	2,080.64	7.43	5.10	-111.855	-214.36	-534.46	575.90	563.37	12.53	45.975			
2,200.00	2,200.00	2,179.49	2,179.34	7.79	5.32	-111.900	-214.34	-533.18	574.69	561.58	13.10	43.864			
2,300.00	2,300.00	2,286.47	2,286.29	8.15	5.56	-112.056	-215.09	-530.87	572.96	559.25	13.71	41.798			
2,400.00	2,400.00	2,383.84	2,383.62	8.51	5.81	-112.214	-215.74	-528.28	570.74	556.43	14.31	39.887			
2,500.00	2,500.00	2,475.62	2,475.40	8.87	6.04	-112.252	-215.64	-527.04	569.45	554.55	14.90	38.208			
2,600.00	2,600.00	2,573.23	2,573.00	9.23	6.29	-112.161	-214.67	-527.05	569.09	553.58	15.51	36.682			
2,700.00	2,700.00	2,674.90	2,674.66	9.58	6.56	-112.005	-213.15	-527.43	568.88	552.74	16.14	35.245			
2,800.00	2,800.00	2,774.77	2,774.53	9.94	6.84	-111.971	-212.75	-527.33	568.64	551.86	16.77	33.898			
2,900.00	2,900.00	2,876.71	2,876.47	10.30	7.13	-112.007	-212.83	-526.59	567.98	550.56	17.43	32.592			
3,000.00	3,000.00	2,977.73	2,977.48	10.66	7.43	-112.062	-213.06	-525.72	567.28	549.20	18.08	31.373			
3,100.00	3,099.99	3,075.69	3,075.44	11.01	7.72	-112.102	-213.13	-524.87	565.19	546.46	18.72	30.189			
3,200.00	3,199.91	3,171.31	3,171.06	11.34	8.00	-112.133	-213.33	-524.69	561.17	541.83	19.34	29.023			
3,300.00	3,299.69	3,270.51	3,270.26	11.68	8.29	-112.145	-213.45	-524.90	554.87	534.91	19.96	27.802			
3,400.00	3,399.27	3,370.32	3,370.06	12.02	8.58	-112.093	-213.02	-525.51	546.13	525.54	20.59	26.527			
3,500.00	3,498.57	3,466.99	3,466.72	12.36	8.87	-112.010	-212.35	-526.31	534.88	513.67	21.21	25.216			
3,600.00	3,597.54	3,567.89	3,567.62	12.70	9.17	-111.918	-211.62	-527.18	521.05	499.19	21.85	23.843			
3,700.00	3,696.09	3,666.91	3,666.64	13.04	9.48	-111.887	-211.41	-527.81	504.62	482.13	22.49	22.438			
3,800.00	3,794.16	3,769.16	3,768.89	13.39	9.80	-111.835	-210.80	-527.96	485.02	461.88	23.14	20.958			
3,900.00	3,891.70	3,867.03	3,866.75	13.74	10.11	-111.733	-209.65	-527.77	462.36	438.57	23.79	19.437			
4,000.00	3,988.62	3,964.40	3,964.11	14.09	10.43	-111.596	-208.33	-527.72	437.21	412.78	24.43	17.896			
4,100.00	4,085.12	4,053.59	4,053.29	14.44	10.71	-111.453	-207.22	-528.00	410.87	385.82	25.05	16.403			
4,200.00	4,181.62	4,145.55	4,145.22	14.80	11.01	-111.247	-206.55	-530.22	386.55	360.88	25.67	15.058			
4,300.00	4,278.12	4,248.90	4,248.54	15.16	11.34	-111.108	-206.46	-532.25	362.08	335.75	26.33	13.752			
4,400.00	4,374.62	4,346.99	4,346.64	15.52	11.66	-111.124	-206.67	-532.22	335.90	308.92	26.98	12.452			
4,500.00	4,471.12	4,445.81	4,445.46	15.89	11.98	-111.198	-207.11	-531.95	309.57	281.95	27.62	11.206			
4,600.00	4,567.62	4,541.56	4,541.20	16.26	12.29	-111.226	-207.20	-531.58	283.03	254.76	28.27	10.011			
4,700.00	4,664.11	4,638.97	4,638.87	16.63	12.77	-112.317	-207.94	-520.33	250.93	222.38	28.55	8.790			
4,800.00	4,760.61	4,818.09	4,808.39	17.00	13.25	-119.531	-213.36	-474.64	196.61	168.83	27.78	7.077			
4,900.00	4,857.11	4,920.65	4,894.33	17.37	13.68	-136.594	-215.97	-419.14	130.80	103.63	27.17	4.814			
5,000.00	4,953.61	4,983.90	4,940.85	17.75	14.01	-171.414	-215.04	-376.35	74.38	43.31	31.07	2.394			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp - Offsets (NAD 83) - Belco AIA Federal 4H - Wellbore #1 - Surveys

Survey Program: 100-GYRO-NS, 1256-MWD										Rule Assigned:				Offset Site Error:
Reference										Distance				Offset Well Error:
Measured	Vertical	Measured	Vertical	Semi Major Axis	Offset	Azimuth	Offset Wellbore Centre		Between	Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth	Reference	Offset	from North	+N/-S	+E/-W	Centres	Centres	Separation	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
5,031.12	4,983.64	4,999.06	4,951.30	17.86	14.10	173.603	-214.52	-365.37	69.20	37.32	31.88	2.171	CC, ES, SF	
5,100.00	5,050.11	5,028.32	4,970.64	18.12	14.28	142.711	-213.49	-343.45	92.61	64.91	27.71	3.343		
5,200.00	5,146.61	5,060.31	4,990.31	18.50	14.50	117.539	-212.14	-318.26	168.30	145.11	23.19	7.259		
5,300.00	5,243.11	5,082.83	5,003.01	18.88	14.67	105.863	-211.12	-299.70	257.08	235.62	21.46	11.980		
5,400.00	5,339.61	5,106.00	5,014.96	19.26	14.86	98.976	-210.12	-279.87	350.33	329.40	20.93	16.735		
5,500.00	5,436.11	5,106.00	5,014.96	19.65	14.86	95.335	-210.12	-279.87	445.51	425.68	19.83	22.462		
5,600.00	5,532.60	5,121.88	5,022.45	20.03	15.00	92.116	-209.37	-265.89	541.87	522.11	19.76	27.422		
5,700.00	5,629.10	5,138.00	5,029.44	20.41	15.15	89.720	-208.44	-251.40	639.24	619.44	19.80	32.285		
5,800.00	5,725.60	5,138.00	5,029.44	20.80	15.15	87.974	-208.44	-251.40	736.89	717.41	19.49	37.815		
5,900.00	5,822.10	5,138.00	5,029.44	21.19	15.15	86.486	-208.44	-251.40	835.10	815.80	19.30	43.262		
6,000.00	5,918.60	5,149.89	5,034.26	21.58	15.27	85.228	-207.68	-240.56	933.50	914.05	19.44	48.009		
6,100.00	6,015.10	5,155.59	5,036.50	21.96	15.32	84.167	-207.31	-235.33	1,032.14	1,012.65	19.49	52.956		
6,200.00	6,111.60	5,170.00	5,041.94	22.35	15.47	83.305	-206.35	-222.02	1,131.07	1,111.35	19.72	57.368		
6,300.00	6,208.10	5,170.00	5,041.94	22.74	15.47	82.487	-206.35	-222.02	1,229.94	1,210.23	19.72	62.376		
6,400.00	6,304.59	5,170.00	5,041.94	23.14	15.47	81.753	-206.35	-222.02	1,328.99	1,309.23	19.75	67.276		
6,500.00	6,401.09	5,170.00	5,041.94	23.53	15.47	81.092	-206.35	-222.02	1,428.16	1,408.34	19.82	72.068		
6,600.00	6,497.59	5,170.00	5,041.94	23.92	15.47	80.494	-206.35	-222.02	1,527.44	1,507.54	19.90	76.751		
6,700.00	6,594.09	5,170.00	5,041.94	24.32	15.47	79.950	-206.35	-222.02	1,626.82	1,606.81	20.00	81.325		
6,800.00	6,690.59	5,183.47	5,046.76	24.71	15.61	79.587	-205.46	-209.47	1,726.08	1,705.81	20.28	85.130		
6,900.00	6,787.09	5,186.36	5,047.76	25.10	15.64	79.164	-205.26	-206.77	1,825.50	1,805.07	20.43	89.351		
7,000.00	6,883.59	5,189.03	5,048.68	25.50	15.67	78.775	-205.09	-204.26	1,924.97	1,904.38	20.59	93.478		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp - Offsets (NAD 83) - Queenie 15 1H - Wellbore #1 - Surveys

Survey Program: 100-GYRO-NS, 1245-MWD										Rule Assigned:		Offset Site Error: 0.00 usft	
Reference Offset										Offset Well Error: 0.00 usft		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-111.421	-351.95	-897.11	963.68				
100.00	100.00	97.94	97.94	0.26	0.13	-111.424	-352.04	-897.16	963.76	963.37	0.39	2,457.921	
200.00	200.00	197.63	197.63	0.62	0.47	-111.433	-352.24	-897.27	963.94	962.84	1.10	880.262	
300.00	300.00	293.37	293.37	0.98	0.81	-111.442	-352.52	-897.58	964.35	962.56	1.79	539.059	
400.00	400.00	389.69	389.69	1.34	1.15	-111.452	-352.97	-898.26	965.18	962.69	2.49	388.375	
500.00	500.00	491.46	491.45	1.70	1.50	-111.466	-353.54	-899.09	966.13	962.93	3.20	301.883	
600.00	600.00	595.20	595.19	2.06	1.87	-111.477	-353.96	-899.64	966.78	962.85	3.92	246.474	
700.00	700.00	696.64	696.62	2.41	2.22	-111.489	-354.29	-899.91	967.14	962.51	4.64	208.611	
800.00	800.00	796.19	796.17	2.77	2.57	-111.499	-354.56	-900.14	967.46	962.12	5.34	181.063	
900.00	900.00	896.44	896.43	3.13	2.92	-111.489	-354.53	-900.51	967.79	961.74	6.05	159.895	
1,000.00	1,000.00	995.16	995.14	3.49	3.27	-111.460	-354.20	-901.05	968.17	961.42	6.76	143.299	
1,100.00	1,100.00	1,092.61	1,092.59	3.85	3.61	-111.429	-353.92	-901.76	968.75	961.30	7.46	129.932	
1,200.00	1,200.00	1,198.94	1,198.92	4.21	3.85	-111.392	-353.64	-902.77	969.57	961.51	8.06	120.303	
1,300.00	1,300.00	1,309.36	1,309.33	4.57	3.96	-111.341	-352.59	-902.41	968.89	960.37	8.53	113.638	
1,400.00	1,400.00	1,412.73	1,412.68	4.92	4.02	-111.281	-351.18	-901.61	967.68	958.74	8.94	108.238	
1,500.00	1,500.00	1,511.37	1,511.31	5.28	4.10	-111.224	-349.78	-900.69	966.30	956.91	9.39	102.959	
1,600.00	1,600.00	1,609.78	1,609.71	5.64	4.22	-111.155	-348.32	-900.14	965.24	955.38	9.86	97.915	
1,700.00	1,700.00	1,710.12	1,710.03	6.00	4.36	-111.080	-346.75	-899.56	964.14	953.78	10.36	93.071	
1,800.00	1,800.00	1,813.02	1,812.92	6.36	4.53	-110.996	-344.99	-898.94	962.96	952.07	10.89	88.438	
1,900.00	1,900.00	1,913.60	1,913.49	6.72	4.72	-110.938	-343.55	-897.90	961.48	950.05	11.43	84.086	
2,000.00	2,000.00	2,013.14	2,013.01	7.07	4.92	-110.964	-343.46	-896.41	960.05	948.06	11.99	80.043	
2,100.00	2,100.00	2,118.12	2,117.97	7.43	5.15	-111.017	-343.67	-894.49	958.42	945.84	12.58	76.183	
2,200.00	2,200.00	2,220.01	2,219.82	7.79	5.39	-111.130	-344.69	-891.92	956.42	943.24	13.18	72.590	
2,300.00	2,300.00	2,324.14	2,323.87	8.15	5.64	-111.321	-346.73	-888.36	953.94	940.15	13.79	69.188	
2,400.00	2,400.00	2,412.45	2,412.10	8.51	5.87	-111.512	-349.00	-885.44	951.83	937.45	14.37	66.224	
2,445.89	2,445.89	2,445.76	2,445.39	8.67	5.95	-111.593	-350.17	-884.74	951.52	936.90	14.62	65.065	
2,500.00	2,500.00	2,491.00	2,490.58	8.87	6.07	-111.713	-352.17	-884.39	951.97	937.04	14.93	63.745	
2,600.00	2,600.00	2,590.25	2,589.76	9.23	6.33	-111.900	-355.61	-884.61	953.46	937.90	15.55	61.302	
2,700.00	2,700.00	2,724.35	2,723.85	9.58	6.71	-111.896	-355.03	-883.33	952.32	936.04	16.28	58.478	
2,800.00	2,800.00	2,823.41	2,822.85	9.94	7.00	-111.804	-352.55	-881.25	949.44	932.51	16.93	56.076	
2,900.00	2,900.00	2,903.79	2,903.20	10.30	7.23	-111.689	-350.30	-880.73	947.84	930.31	17.53	54.076	
2,914.00	2,914.00	2,914.16	2,913.56	10.35	7.26	-111.670	-349.99	-880.83	947.82	930.21	17.61	53.827	
3,000.00	3,000.00	2,981.68	2,981.03	10.66	7.46	-111.518	-347.93	-882.48	948.77	930.66	18.11	52.388	
3,100.00	3,099.99	3,072.03	3,071.25	11.01	7.72	-111.258	-344.76	-886.16	949.97	931.25	18.72	50.754	
3,200.00	3,199.91	3,167.08	3,166.12	11.34	8.00	-110.960	-341.28	-890.82	949.30	929.97	19.33	49.106	
3,300.00	3,299.69	3,274.89	3,273.73	11.68	8.33	-110.621	-337.32	-895.98	945.94	925.94	20.00	47.299	
3,400.00	3,399.27	3,373.00	3,371.69	12.02	8.64	-110.321	-333.80	-900.26	939.62	918.98	20.64	45.530	
3,500.00	3,498.57	3,470.15	3,468.66	12.36	8.94	-109.991	-329.97	-904.73	930.82	909.54	21.28	43.748	
3,600.00	3,597.54	3,553.18	3,551.12	12.70	9.21	-109.420	-322.67	-910.47	920.10	898.24	21.87	42.076	
3,700.00	3,696.09	3,623.00	3,619.35	13.04	9.44	-108.493	-310.81	-919.18	909.62	887.22	22.40	40.611	
3,800.00	3,794.16	3,685.00	3,678.74	13.39	9.66	-107.353	-296.71	-929.97	900.24	877.37	22.87	39.363	
3,900.00	3,891.70	3,736.92	3,727.30	13.74	9.86	-106.160	-282.96	-942.12	893.70	870.46	23.24	38.453	
4,000.00	3,988.62	3,806.12	3,790.13	14.09	10.14	-104.299	-261.64	-961.71	889.68	865.98	23.70	37.542	
4,064.73	4,051.12	3,841.00	3,820.98	14.32	10.29	-103.192	-249.40	-972.43	888.39	864.49	23.90	37.176 CC, ES	
4,100.00	4,085.12	3,859.90	3,837.38	14.44	10.38	-102.549	-242.39	-978.66	888.53	864.53	23.99	37.030 SF	
4,200.00	4,181.62	3,903.00	3,873.93	14.80	10.59	-100.927	-225.61	-994.18	893.80	869.68	24.12	37.054	
4,300.00	4,278.12	3,958.81	3,919.50	15.16	10.90	-98.726	-202.21	-1,016.29	905.29	880.96	24.32	37.219	
4,400.00	4,374.62	4,013.68	3,962.56	15.52	11.24	-96.396	-177.64	-1,039.80	922.89	898.42	24.47	37.711	
4,500.00	4,471.12	4,059.00	3,996.88	15.89	11.55	-94.265	-156.08	-1,060.07	946.16	921.70	24.45	38.693	
4,600.00	4,567.62	4,108.99	4,032.95	16.26	11.92	-91.822	-130.69	-1,083.57	975.48	951.02	24.46	39.879	
4,700.00	4,664.11	4,153.00	4,063.44	16.63	12.29	-89.503	-107.24	-1,104.95	1,010.37	986.02	24.36	41.480	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp - Offsets (NAD 83) - Queenie 15 1H - Wellbore #1 - Surveys

Survey Program: 100-GYRO-NS, 1245-MWD										Rule Assigned:			Offset Site Error:
Reference Offset										Distance			Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,800.00	4,760.61	4,184.00	4,083.86	17.00	12.56	-87.591	-90.01	-1,120.67	1,051.18	1,027.14	24.04	43.726	
4,900.00	4,857.11	4,224.78	4,109.57	17.37	12.95	-85.240	-66.69	-1,142.08	1,097.36	1,073.48	23.87	45.963	
5,000.00	4,953.61	4,257.68	4,129.69	17.75	13.29	-83.156	-47.60	-1,159.79	1,148.07	1,124.47	23.60	48.648	
5,100.00	5,050.11	4,276.00	4,140.43	18.12	13.48	-81.564	-36.81	-1,169.96	1,203.54	1,180.42	23.12	52.067	
5,200.00	5,146.61	4,307.00	4,157.56	18.50	13.83	-79.460	-18.14	-1,187.81	1,263.42	1,240.55	22.87	55.242	
5,300.00	5,243.11	4,320.62	4,164.66	18.88	13.99	-77.935	-9.78	-1,195.89	1,327.19	1,304.80	22.39	59.267	
5,400.00	5,339.61	4,338.00	4,173.38	19.26	14.19	-76.229	0.98	-1,206.38	1,394.44	1,372.41	22.03	63.309	
5,500.00	5,436.11	4,369.00	4,188.35	19.65	14.58	-74.034	20.36	-1,225.39	1,464.43	1,442.51	21.92	66.811	
5,600.00	5,532.60	4,401.00	4,203.19	20.03	14.99	-71.813	40.61	-1,245.23	1,536.76	1,514.89	21.87	70.262	
5,700.00	5,629.10	4,437.06	4,219.42	20.41	15.48	-69.484	63.77	-1,267.60	1,610.98	1,589.05	21.93	73.474	
5,800.00	5,725.60	4,479.35	4,238.17	20.80	16.07	-67.039	91.14	-1,293.82	1,686.59	1,664.48	22.11	76.289	
5,900.00	5,822.10	4,525.00	4,258.23	21.19	16.72	-64.618	120.71	-1,322.24	1,763.37	1,740.99	22.37	78.822	
6,000.00	5,918.60	4,564.26	4,275.29	21.58	17.30	-62.437	146.20	-1,346.75	1,841.19	1,818.62	22.58	81.557	
6,100.00	6,015.10	4,604.42	4,292.57	21.96	17.91	-60.324	172.33	-1,371.88	1,919.98	1,897.16	22.82	84.143	
6,200.00	6,111.60	4,647.79	4,311.03	22.35	18.58	-58.254	200.58	-1,399.12	1,999.64	1,976.51	23.13	86.444	



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp E2-1 (113H,116H,123H,124H,126H) - Double Stamp Fed Com 113H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	2.00	2.00	0.00	0.01	88.677	25.04	1,084.23	1,084.52				
100.00	100.00	102.00	102.00	0.26	0.27	88.677	25.04	1,084.23	1,084.52	1,083.98	0.53	2,030.458	
200.00	200.00	202.00	202.00	0.62	0.63	88.677	25.04	1,084.23	1,084.52	1,083.26	1.25	866.873	
300.00	300.00	302.00	302.00	0.98	0.99	88.677	25.04	1,084.23	1,084.52	1,082.55	1.97	551.072	
400.00	400.00	402.00	402.00	1.34	1.35	88.677	25.04	1,084.23	1,084.52	1,081.83	2.68	403.923	
500.00	500.00	502.00	502.00	1.70	1.70	88.677	25.04	1,084.23	1,084.52	1,081.11	3.40	318.797	
600.00	600.00	602.00	602.00	2.06	2.06	88.677	25.04	1,084.23	1,084.52	1,080.40	4.12	263.306	
700.00	700.00	702.00	702.00	2.41	2.42	88.677	25.04	1,084.23	1,084.52	1,079.68	4.84	224.269	
800.00	800.00	802.00	802.00	2.77	2.78	88.677	25.04	1,084.23	1,084.52	1,078.96	5.55	195.312	
900.00	900.00	902.00	902.00	3.13	3.14	88.677	25.04	1,084.23	1,084.52	1,078.25	6.27	172.978	
1,000.00	1,000.00	1,002.00	1,002.00	3.49	3.50	88.677	25.04	1,084.23	1,084.52	1,077.53	6.99	155.228	
1,100.00	1,100.00	1,102.00	1,102.00	3.85	3.86	88.677	25.04	1,084.23	1,084.52	1,076.81	7.70	140.781	
1,165.99	1,165.99	1,167.99	1,167.99	4.08	4.09	88.677	25.04	1,084.23	1,084.52	1,076.34	8.18	132.636 CC	
1,200.00	1,200.00	1,200.00	1,200.00	4.21	4.21	88.677	25.04	1,084.23	1,084.52	1,076.10	8.41	128.905	
1,300.00	1,300.00	1,293.98	1,293.98	4.57	4.53	88.713	24.36	1,084.59	1,084.89	1,075.80	9.09	119.317 ES	
1,400.00	1,400.00	1,386.07	1,386.04	4.92	4.83	88.819	22.38	1,085.65	1,086.00	1,076.24	9.75	111.348	
1,500.00	1,500.00	1,478.06	1,477.95	5.28	5.14	88.994	19.09	1,087.40	1,087.84	1,077.42	10.42	104.447	
1,600.00	1,600.00	1,569.91	1,569.65	5.64	5.44	89.237	14.51	1,089.85	1,090.42	1,079.34	11.08	98.422	
1,700.00	1,700.00	1,661.57	1,661.07	6.00	5.75	89.547	8.65	1,092.97	1,093.77	1,082.03	11.74	93.133	
1,800.00	1,800.00	1,752.99	1,752.14	6.36	6.07	89.921	1.52	1,096.78	1,097.91	1,085.50	12.41	88.471	
1,900.00	1,900.00	1,844.88	1,843.52	6.72	6.38	90.361	-6.93	1,101.29	1,102.86	1,089.79	13.08	84.327	
2,000.00	2,000.00	1,944.26	1,942.29	7.07	6.72	90.862	-16.65	1,106.47	1,108.21	1,094.43	13.78	80.429	
2,100.00	2,100.00	2,043.64	2,041.06	7.43	7.07	91.358	-26.36	1,111.66	1,113.64	1,099.16	14.48	76.902	
2,200.00	2,200.00	2,143.03	2,139.83	7.79	7.42	91.850	-36.08	1,116.84	1,119.15	1,103.97	15.19	73.698	
2,300.00	2,300.00	2,242.41	2,238.60	8.15	7.77	92.337	-45.79	1,122.03	1,124.75	1,108.86	15.89	70.776	
2,400.00	2,400.00	2,341.80	2,337.38	8.51	8.12	92.819	-55.51	1,127.21	1,130.43	1,113.83	16.60	68.102	
2,500.00	2,500.00	2,441.18	2,436.15	8.87	8.47	93.296	-65.22	1,132.40	1,136.18	1,118.87	17.31	65.646	
2,600.00	2,600.00	2,540.57	2,534.92	9.23	8.83	93.769	-74.94	1,137.58	1,142.02	1,124.00	18.02	63.384	
2,700.00	2,700.00	2,639.95	2,633.69	9.58	9.18	94.236	-84.65	1,142.76	1,147.93	1,129.20	18.73	61.294	
2,800.00	2,800.00	2,739.33	2,732.47	9.94	9.54	94.699	-94.36	1,147.95	1,153.92	1,134.48	19.44	59.359	
2,900.00	2,900.00	2,838.72	2,831.24	10.30	9.89	95.157	-104.08	1,153.13	1,159.98	1,139.83	20.15	57.562	
3,000.00	3,000.00	2,938.10	2,930.01	10.66	10.25	95.611	-113.79	1,158.32	1,166.12	1,145.25	20.86	55.890	
3,100.00	3,099.99	3,037.46	3,028.76	11.01	10.61	96.030	-123.51	1,163.50	1,173.49	1,151.92	21.57	54.415	
3,200.00	3,199.91	3,136.71	3,127.40	11.34	10.97	96.384	-133.21	1,168.68	1,183.22	1,160.97	22.26	53.166	
3,300.00	3,299.69	3,235.80	3,225.87	11.68	11.33	96.672	-142.89	1,173.85	1,195.30	1,172.35	22.95	52.094	
3,400.00	3,399.27	3,334.64	3,324.11	12.02	11.69	96.895	-152.55	1,179.00	1,209.68	1,186.05	23.63	51.182	
3,500.00	3,498.57	3,433.18	3,422.04	12.36	12.04	97.054	-162.19	1,184.14	1,226.35	1,202.03	24.32	50.418	
3,600.00	3,597.54	3,531.35	3,519.61	12.70	12.40	97.149	-171.78	1,189.26	1,245.29	1,220.28	25.01	49.789	
3,700.00	3,696.09	3,629.08	3,616.73	13.04	12.76	97.183	-181.33	1,194.36	1,266.46	1,240.77	25.70	49.284	
3,800.00	3,794.16	3,726.29	3,713.35	13.39	13.11	97.160	-190.84	1,199.43	1,289.87	1,263.48	26.38	48.894	
3,900.00	3,891.70	3,822.94	3,809.40	13.74	13.46	97.081	-200.28	1,204.47	1,315.48	1,288.42	27.06	48.611	
4,000.00	3,988.62	3,918.94	3,904.81	14.09	13.81	96.952	-209.67	1,209.48	1,343.29	1,315.55	27.74	48.427	
4,100.00	4,085.12	4,014.51	3,999.80	14.44	14.16	96.795	-219.01	1,214.47	1,372.48	1,344.07	28.41	48.303	
4,200.00	4,181.62	4,110.08	4,094.77	14.80	14.51	96.644	-228.35	1,219.45	1,401.71	1,372.62	29.09	48.186	
4,300.00	4,278.12	4,205.64	4,189.75	15.16	14.86	96.499	-237.69	1,224.44	1,430.94	1,401.17	29.77	48.070	
4,400.00	4,374.62	4,301.21	4,284.73	15.52	15.21	96.359	-247.03	1,229.42	1,460.18	1,429.73	30.45	47.957	
4,500.00	4,471.12	4,396.77	4,379.70	15.89	15.56	96.226	-256.38	1,234.41	1,489.43	1,458.30	31.13	47.847	
4,600.00	4,567.62	4,492.34	4,474.68	16.26	15.91	96.097	-265.72	1,239.39	1,518.69	1,486.88	31.81	47.739	
4,700.00	4,664.11	4,587.90	4,569.65	16.63	16.26	95.973	-275.06	1,244.38	1,547.95	1,515.45	32.50	47.634	
4,800.00	4,760.61	4,683.47	4,664.63	17.00	16.61	95.854	-284.40	1,249.36	1,577.22	1,544.04	33.18	47.531	
4,900.00	4,857.11	4,779.03	4,759.61	17.37	16.96	95.739	-293.74	1,254.35	1,606.50	1,572.63	33.87	47.430	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp E2-1 (113H, 116H, 123H, 124H, 126H) - Double Stamp Fed Com 113H - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre			Rule Assigned:				Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,953.61	4,874.59	4,854.58	17.75	17.31	95.629	-303.08	1,259.33	1,635.79	1,601.23	34.56	47.332		
5,100.00	5,050.11	4,970.16	4,949.56	18.12	17.66	95.522	-312.42	1,264.32	1,665.08	1,629.83	35.25	47.236		
5,200.00	5,146.61	5,065.72	5,044.53	18.50	18.01	95.419	-321.76	1,269.30	1,694.37	1,658.43	35.94	47.142		
5,300.00	5,243.11	5,161.29	5,139.51	18.88	18.36	95.319	-331.10	1,274.29	1,723.67	1,687.04	36.63	47.051		
5,400.00	5,339.61	5,256.85	5,234.49	19.26	18.71	95.223	-340.45	1,279.27	1,752.98	1,715.65	37.33	46.962		
5,500.00	5,436.11	5,352.42	5,329.46	19.65	19.06	95.130	-349.79	1,284.26	1,782.29	1,744.27	38.02	46.875		
5,600.00	5,532.60	5,447.98	5,424.44	20.03	19.41	95.040	-359.13	1,289.24	1,811.61	1,772.89	38.72	46.791		
5,700.00	5,629.10	5,543.55	5,519.41	20.41	19.76	94.953	-368.47	1,294.23	1,840.93	1,801.51	39.41	46.708		
5,800.00	5,725.60	5,639.11	5,614.39	20.80	20.12	94.868	-377.81	1,299.21	1,870.25	1,830.14	40.11	46.627		
5,900.00	5,822.10	5,734.67	5,709.37	21.19	20.47	94.786	-387.15	1,304.20	1,899.58	1,858.77	40.81	46.548		
6,000.00	5,918.60	5,830.24	5,804.34	21.58	20.82	94.707	-396.49	1,309.18	1,928.91	1,887.41	41.51	46.471		
6,100.00	6,015.10	5,925.80	5,899.32	21.96	21.17	94.630	-405.83	1,314.17	1,958.25	1,916.04	42.21	46.396		
6,200.00	6,111.60	6,021.37	5,994.29	22.35	21.52	94.555	-415.18	1,319.15	1,987.59	1,944.68	42.91	46.323 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp E2-1 (113H,116H,123H,124H,126H) - Double Stamp Fed Com 116H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	2.00	2.00	0.00	0.01	88.707	25.04	1,109.23	1,109.51				
100.00	100.00	102.00	102.00	0.26	0.27	88.707	25.04	1,109.23	1,109.51	1,108.97	0.53	2,077.252	
200.00	200.00	202.00	202.00	0.62	0.63	88.707	25.04	1,109.23	1,109.51	1,108.26	1.25	886.850	
300.00	300.00	302.00	302.00	0.98	0.99	88.707	25.04	1,109.23	1,109.51	1,107.54	1.97	563.772	
400.00	400.00	402.00	402.00	1.34	1.35	88.707	25.04	1,109.23	1,109.51	1,106.82	2.68	413.232	
500.00	500.00	502.00	502.00	1.70	1.70	88.707	25.04	1,109.23	1,109.51	1,106.11	3.40	326.144	
600.00	600.00	602.00	602.00	2.06	2.06	88.707	25.04	1,109.23	1,109.51	1,105.39	4.12	269.374	
700.00	700.00	702.00	702.00	2.41	2.42	88.707	25.04	1,109.23	1,109.51	1,104.67	4.84	229.437	
800.00	800.00	802.00	802.00	2.77	2.78	88.707	25.04	1,109.23	1,109.51	1,103.96	5.55	199.813	
900.00	900.00	902.00	902.00	3.13	3.14	88.707	25.04	1,109.23	1,109.51	1,103.24	6.27	176.964	
1,000.00	1,000.00	1,002.00	1,002.00	3.49	3.50	88.707	25.04	1,109.23	1,109.51	1,102.52	6.99	158.805	
1,100.00	1,100.00	1,102.00	1,102.00	3.85	3.86	88.707	25.04	1,109.23	1,109.51	1,101.80	7.70	144.026	
1,200.00	1,200.00	1,202.00	1,202.00	4.21	4.21	88.707	25.04	1,109.23	1,109.51	1,101.09	8.42	131.763	
1,300.00	1,300.00	1,302.00	1,302.00	4.57	4.57	88.707	25.04	1,109.23	1,109.51	1,100.37	9.14	121.424	
1,400.00	1,400.00	1,402.00	1,402.00	4.92	4.93	88.707	25.04	1,109.23	1,109.51	1,099.65	9.85	112.590	
1,500.00	1,500.00	1,502.00	1,502.00	5.28	5.29	88.707	25.04	1,109.23	1,109.51	1,098.94	10.57	104.955	
1,600.00	1,600.00	1,602.00	1,602.00	5.64	5.65	88.707	25.04	1,109.23	1,109.51	1,098.22	11.29	98.289	
1,700.00	1,700.00	1,702.00	1,702.00	6.00	6.01	88.707	25.04	1,109.23	1,109.51	1,097.50	12.01	92.419	
1,765.99	1,765.99	1,767.99	1,767.99	6.24	6.24	88.707	25.04	1,109.23	1,109.51	1,097.03	12.48	88.915 CC	
1,800.00	1,800.00	1,800.00	1,800.00	6.36	6.36	88.707	25.04	1,109.23	1,109.51	1,096.80	12.71	87.260 ES	
1,900.00	1,900.00	1,880.11	1,880.11	6.72	6.64	88.721	24.78	1,110.02	1,110.51	1,097.17	13.35	83.191	
2,000.00	2,000.00	1,958.58	1,958.54	7.07	6.90	88.764	23.99	1,112.34	1,113.45	1,099.48	13.97	79.721	
2,100.00	2,100.00	2,036.92	2,036.77	7.43	7.17	88.835	22.69	1,116.19	1,118.32	1,103.74	14.58	76.713	
2,200.00	2,200.00	2,115.06	2,114.71	7.79	7.43	88.933	20.89	1,121.53	1,125.12	1,109.93	15.18	74.098	
2,300.00	2,300.00	2,200.00	2,199.27	8.15	7.72	89.069	18.35	1,129.05	1,133.86	1,118.05	15.82	71.693	
2,400.00	2,400.00	2,270.49	2,269.30	8.51	7.97	89.204	15.79	1,136.64	1,144.47	1,128.10	16.38	69.880	
2,500.00	2,500.00	2,347.65	2,345.78	8.87	8.23	89.375	12.51	1,146.36	1,157.02	1,140.06	16.96	68.203	
2,600.00	2,600.00	2,424.37	2,421.59	9.23	8.50	89.566	8.76	1,157.47	1,171.47	1,153.93	17.54	66.777	
2,700.00	2,700.00	2,500.00	2,496.09	9.58	8.77	89.775	4.59	1,169.83	1,187.82	1,169.71	18.11	65.589	
2,800.00	2,800.00	2,576.23	2,570.90	9.94	9.03	90.005	-0.10	1,183.70	1,206.05	1,187.37	18.67	64.584	
2,900.00	2,900.00	2,651.26	2,644.24	10.30	9.30	90.247	-5.17	1,198.73	1,226.14	1,206.91	19.23	63.777	
3,000.00	3,000.00	2,725.64	2,716.61	10.66	9.57	90.502	-10.65	1,214.97	1,248.09	1,228.32	19.77	63.140	
3,100.00	3,099.99	2,800.00	2,788.62	11.01	9.84	90.748	-16.59	1,232.54	1,273.04	1,252.75	20.29	62.736	
3,200.00	3,199.91	2,871.32	2,857.33	11.34	10.10	90.949	-22.70	1,250.64	1,302.11	1,281.33	20.78	62.654	
3,300.00	3,299.69	2,955.21	2,937.79	11.68	10.40	91.160	-30.30	1,273.16	1,334.94	1,313.58	21.36	62.504	
3,400.00	3,399.27	3,048.67	3,027.38	12.02	10.75	91.356	-38.81	1,298.37	1,370.23	1,348.23	22.00	62.280	
3,500.00	3,498.57	3,141.30	3,116.17	12.36	11.10	91.495	-47.25	1,323.36	1,407.76	1,385.12	22.64	62.174 SF	
3,600.00	3,597.54	3,233.04	3,204.11	12.70	11.44	91.583	-55.60	1,348.12	1,447.50	1,424.22	23.28	62.179	
3,700.00	3,696.09	3,323.82	3,291.13	13.04	11.79	91.623	-63.87	1,372.61	1,489.43	1,465.51	23.91	62.286	
3,800.00	3,794.16	3,413.58	3,377.17	13.39	12.13	91.618	-72.05	1,396.83	1,533.50	1,508.96	24.54	62.487	
3,900.00	3,891.70	3,502.26	3,462.18	13.74	12.48	91.572	-80.12	1,420.75	1,579.69	1,554.53	25.16	62.775	
4,000.00	3,988.62	3,589.80	3,546.09	14.09	12.81	91.489	-88.10	1,444.37	1,627.98	1,602.19	25.78	63.144	
4,100.00	4,085.12	3,676.59	3,629.29	14.44	13.15	91.386	-96.00	1,467.79	1,677.56	1,651.17	26.40	63.556	
4,200.00	4,181.62	3,763.37	3,712.48	14.80	13.49	91.290	-103.91	1,491.21	1,727.17	1,700.16	27.01	63.949	
4,300.00	4,278.12	3,850.16	3,795.67	15.16	13.83	91.198	-111.81	1,514.62	1,776.78	1,749.16	27.62	64.319	
4,400.00	4,374.62	3,936.94	3,878.86	15.52	14.17	91.112	-119.72	1,538.04	1,826.40	1,798.16	28.24	64.668	
4,500.00	4,471.12	4,023.72	3,962.05	15.89	14.52	91.030	-127.62	1,561.45	1,876.02	1,847.16	28.86	64.997	
4,600.00	4,567.62	4,110.50	4,045.24	16.26	14.86	90.952	-135.53	1,584.87	1,925.64	1,896.16	29.49	65.308	
4,700.00	4,664.11	4,197.29	4,128.43	16.63	15.21	90.879	-143.43	1,608.28	1,975.27	1,945.16	30.11	65.601	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp E2-1 (113H,116H,123H,124H,126H) - Double Stamp Fed Com 123H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	2.00	2.00	0.00	0.01	89.998	0.04	1,084.23	1,084.23				
100.00	100.00	102.00	102.00	0.26	0.27	89.998	0.04	1,084.23	1,084.23	1,083.69	0.53	2,029.917	
200.00	200.00	202.00	202.00	0.62	0.63	89.998	0.04	1,084.23	1,084.23	1,082.97	1.25	866.641	
300.00	300.00	302.00	302.00	0.98	0.99	89.998	0.04	1,084.23	1,084.23	1,082.26	1.97	550.925	
400.00	400.00	402.00	402.00	1.34	1.35	89.998	0.04	1,084.23	1,084.23	1,081.54	2.68	403.816	
500.00	500.00	502.00	502.00	1.70	1.70	89.998	0.04	1,084.23	1,084.23	1,080.82	3.40	318.712	
600.00	600.00	602.00	602.00	2.06	2.06	89.998	0.04	1,084.23	1,084.23	1,080.11	4.12	263.236	
700.00	700.00	702.00	702.00	2.41	2.42	89.998	0.04	1,084.23	1,084.23	1,079.39	4.84	224.209	
800.00	800.00	802.00	802.00	2.77	2.78	89.998	0.04	1,084.23	1,084.23	1,078.67	5.55	195.260	
900.00	900.00	902.00	902.00	3.13	3.14	89.998	0.04	1,084.23	1,084.23	1,077.96	6.27	172.932	
1,000.00	1,000.00	1,002.00	1,002.00	3.49	3.50	89.998	0.04	1,084.23	1,084.23	1,077.24	6.99	155.186	
1,100.00	1,100.00	1,102.00	1,102.00	3.85	3.86	89.998	0.04	1,084.23	1,084.23	1,076.52	7.70	140.744	
1,165.99	1,165.99	1,167.99	1,167.99	4.08	4.09	89.998	0.04	1,084.23	1,084.23	1,076.05	8.18	132.600 CC	
1,200.00	1,200.00	1,200.00	1,200.00	4.21	4.21	89.998	0.04	1,084.23	1,084.23	1,075.81	8.41	128.870	
1,300.00	1,300.00	1,296.54	1,296.54	4.57	4.54	90.039	-0.73	1,084.47	1,084.48	1,075.38	9.10	119.165 ES	
1,400.00	1,400.00	1,391.14	1,391.11	4.92	4.85	90.158	-3.00	1,085.18	1,085.23	1,075.47	9.77	111.097	
1,500.00	1,500.00	1,485.64	1,485.52	5.28	5.16	90.356	-6.75	1,086.35	1,086.49	1,076.06	10.44	104.086	
1,600.00	1,600.00	1,579.98	1,579.70	5.64	5.47	90.631	-11.98	1,087.98	1,088.27	1,077.16	11.11	97.948	
1,700.00	1,700.00	1,674.11	1,673.57	6.00	5.79	90.981	-18.67	1,090.07	1,090.60	1,078.82	11.78	92.542	
1,800.00	1,800.00	1,767.99	1,767.06	6.36	6.11	91.405	-26.81	1,092.61	1,093.50	1,081.04	12.46	87.759	
1,900.00	1,900.00	1,864.36	1,862.89	6.72	6.44	91.908	-36.50	1,095.64	1,096.94	1,083.80	13.15	83.436	
2,000.00	2,000.00	1,963.78	1,961.74	7.07	6.78	92.434	-46.71	1,098.83	1,100.55	1,086.71	13.85	79.475	
2,100.00	2,100.00	2,063.20	2,060.58	7.43	7.13	92.956	-56.91	1,102.01	1,104.26	1,089.71	14.55	75.889	
2,200.00	2,200.00	2,162.62	2,159.42	7.79	7.48	93.475	-67.12	1,105.20	1,108.06	1,092.80	15.26	72.631	
2,300.00	2,300.00	2,262.04	2,258.27	8.15	7.83	93.991	-77.33	1,108.39	1,111.94	1,095.98	15.96	69.659	
2,400.00	2,400.00	2,361.46	2,357.11	8.51	8.18	94.503	-87.54	1,111.58	1,115.92	1,099.25	16.67	66.938	
2,500.00	2,500.00	2,460.88	2,455.95	8.87	8.53	95.011	-97.74	1,114.77	1,119.99	1,102.61	17.38	64.439	
2,600.00	2,600.00	2,560.30	2,554.80	9.23	8.88	95.516	-107.95	1,117.95	1,124.14	1,106.05	18.09	62.138	
2,700.00	2,700.00	2,659.72	2,653.64	9.58	9.24	96.016	-118.16	1,121.14	1,128.39	1,109.58	18.80	60.012	
2,800.00	2,800.00	2,759.14	2,752.48	9.94	9.59	96.513	-128.37	1,124.33	1,132.72	1,113.20	19.52	58.043	
2,900.00	2,900.00	2,858.56	2,851.32	10.30	9.95	97.007	-138.58	1,127.52	1,137.13	1,116.90	20.23	56.215	
3,000.00	3,000.00	2,957.98	2,950.17	10.66	10.31	97.496	-148.78	1,130.70	1,141.63	1,120.69	20.94	54.514	
3,100.00	3,099.99	3,057.40	3,049.01	11.01	10.67	97.950	-158.99	1,133.89	1,147.35	1,125.71	21.64	53.010	
3,200.00	3,199.91	3,156.77	3,147.80	11.34	11.03	98.334	-169.19	1,137.08	1,155.41	1,133.07	22.33	51.731	
3,300.00	3,299.69	3,256.02	3,246.48	11.68	11.38	98.648	-179.38	1,140.26	1,165.77	1,142.75	23.03	50.628	
3,400.00	3,399.27	3,355.09	3,344.97	12.02	11.74	98.892	-189.56	1,143.44	1,178.42	1,154.70	23.72	49.684	
3,500.00	3,498.57	3,453.91	3,443.22	12.36	12.10	99.065	-199.70	1,146.61	1,193.31	1,168.90	24.41	48.887	
3,600.00	3,597.54	3,552.40	3,541.14	12.70	12.46	99.170	-209.81	1,149.76	1,210.42	1,185.32	25.10	48.225	
3,700.00	3,696.09	3,650.51	3,638.68	13.04	12.81	99.210	-219.89	1,152.91	1,229.75	1,203.96	25.79	47.686	
3,800.00	3,794.16	3,748.17	3,735.77	13.39	13.17	99.186	-229.91	1,156.04	1,251.26	1,224.79	26.48	47.262	
3,900.00	3,891.70	3,845.30	3,832.34	13.74	13.52	99.101	-239.89	1,159.16	1,274.95	1,247.80	27.16	46.943	
4,000.00	3,988.62	3,941.84	3,928.32	14.09	13.87	98.961	-249.80	1,162.25	1,300.81	1,272.97	27.84	46.723	
4,100.00	4,085.12	4,037.98	4,023.91	14.44	14.23	98.790	-259.67	1,165.33	1,328.04	1,299.52	28.52	46.564	
4,200.00	4,181.62	4,134.12	4,119.49	14.80	14.58	98.625	-269.54	1,168.42	1,355.29	1,326.09	29.20	46.412	
4,300.00	4,278.12	4,230.26	4,215.06	15.16	14.93	98.467	-279.41	1,171.50	1,382.55	1,352.67	29.88	46.264	
4,400.00	4,374.62	4,326.39	4,310.64	15.52	15.28	98.315	-289.28	1,174.58	1,409.83	1,379.26	30.57	46.120	
4,500.00	4,471.12	4,422.53	4,406.22	15.89	15.63	98.169	-299.15	1,177.66	1,437.11	1,405.86	31.26	45.980	
4,600.00	4,567.62	4,518.67	4,501.80	16.26	15.98	98.028	-309.02	1,180.75	1,464.41	1,432.46	31.94	45.844	
4,700.00	4,664.11	4,614.80	4,597.38	16.63	16.33	97.892	-318.89	1,183.83	1,491.71	1,459.07	32.63	45.711	
4,800.00	4,760.61	4,710.94	4,692.96	17.00	16.68	97.761	-328.76	1,186.91	1,519.02	1,485.69	33.32	45.583	
4,900.00	4,857.11	4,807.08	4,788.54	17.37	17.04	97.635	-338.64	1,190.00	1,546.34	1,512.32	34.02	45.458	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp E2-1 (113H,116H,123H,124H,126H) - Double Stamp Fed Com 123H - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:						Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,000.00	4,953.61	4,903.21	4,884.12	17.75	17.39	97.513	-348.51	1,193.08	1,573.66	1,538.95	34.71	45.336		
5,100.00	5,050.11	4,999.35	4,979.70	18.12	17.74	97.396	-358.38	1,196.16	1,600.99	1,565.59	35.41	45.218		
5,200.00	5,146.61	5,095.49	5,075.27	18.50	18.09	97.282	-368.25	1,199.24	1,628.33	1,592.23	36.10	45.103		
5,300.00	5,243.11	5,191.62	5,170.85	18.88	18.45	97.172	-378.12	1,202.33	1,655.68	1,618.88	36.80	44.991		
5,400.00	5,339.61	5,287.76	5,266.43	19.26	18.80	97.066	-387.99	1,205.41	1,683.03	1,645.53	37.50	44.882		
5,500.00	5,436.11	5,383.90	5,362.01	19.65	19.15	96.963	-397.86	1,208.49	1,710.38	1,672.18	38.20	44.777		
5,600.00	5,532.60	5,480.03	5,457.59	20.03	19.50	96.863	-407.73	1,211.57	1,737.74	1,698.85	38.90	44.674		
5,700.00	5,629.10	5,576.17	5,553.17	20.41	19.86	96.767	-417.60	1,214.66	1,765.11	1,725.51	39.60	44.574		
5,800.00	5,725.60	5,672.31	5,648.75	20.80	20.21	96.673	-427.47	1,217.74	1,792.48	1,752.18	40.30	44.476		
5,900.00	5,822.10	5,768.44	5,744.33	21.19	20.56	96.582	-437.34	1,220.82	1,819.86	1,778.85	41.00	44.382		
6,000.00	5,918.60	5,864.58	5,839.91	21.58	20.92	96.494	-447.21	1,223.90	1,847.24	1,805.53	41.71	44.289		
6,100.00	6,015.10	5,968.67	5,943.42	21.96	21.30	96.424	-457.60	1,227.15	1,874.51	1,832.06	42.45	44.156		
6,200.00	6,111.60	6,079.72	6,054.05	22.35	21.70	96.323	-466.87	1,230.04	1,901.12	1,857.89	43.23	43.978		
6,300.00	6,208.10	6,191.03	6,165.10	22.74	22.11	96.167	-474.11	1,232.31	1,926.99	1,882.99	44.00	43.793		
6,400.00	6,304.59	6,302.51	6,276.45	23.14	22.51	95.958	-479.30	1,233.93	1,952.14	1,907.37	44.77	43.602		
6,500.00	6,401.09	6,414.08	6,387.97	23.53	22.91	95.696	-482.42	1,234.90	1,976.58	1,931.04	45.54	43.405 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp E2-1 (113H,116H,123H,124H,126H) - Double Stamp Fed Com 124H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	2.00	2.00	0.00	0.01	89.998	0.04	1,189.23	1,189.23				
100.00	100.00	102.00	102.00	0.26	0.27	89.998	0.04	1,189.23	1,189.23	1,188.69	0.53	2,226.501	
200.00	200.00	202.00	202.00	0.62	0.63	89.998	0.04	1,189.23	1,189.23	1,187.97	1.25	950.570	
300.00	300.00	302.00	302.00	0.98	0.99	89.998	0.04	1,189.23	1,189.23	1,187.26	1.97	604.279	
400.00	400.00	402.00	402.00	1.34	1.35	89.998	0.04	1,189.23	1,189.23	1,186.54	2.68	442.922	
500.00	500.00	502.00	502.00	1.70	1.70	89.998	0.04	1,189.23	1,189.23	1,185.82	3.40	349.577	
600.00	600.00	602.00	602.00	2.06	2.06	89.998	0.04	1,189.23	1,189.23	1,185.11	4.12	288.728	
700.00	700.00	702.00	702.00	2.41	2.42	89.998	0.04	1,189.23	1,189.23	1,184.39	4.84	245.922	
800.00	800.00	802.00	802.00	2.77	2.78	89.998	0.04	1,189.23	1,189.23	1,183.67	5.55	214.170	
900.00	900.00	902.00	902.00	3.13	3.14	89.998	0.04	1,189.23	1,189.23	1,182.96	6.27	189.679	
1,000.00	1,000.00	1,002.00	1,002.00	3.49	3.50	89.998	0.04	1,189.23	1,189.23	1,182.24	6.99	170.215	
1,100.00	1,100.00	1,102.00	1,102.00	3.85	3.86	89.998	0.04	1,189.23	1,189.23	1,181.52	7.70	154.374	
1,165.99	1,165.99	1,167.99	1,167.99	4.08	4.09	89.998	0.04	1,189.23	1,189.23	1,181.05	8.18	145.442 CC	
1,200.00	1,200.00	1,200.00	1,200.00	4.21	4.21	89.998	0.04	1,189.23	1,189.23	1,180.81	8.41	141.351 ES	
1,300.00	1,300.00	1,285.85	1,285.84	4.57	4.50	90.011	-0.23	1,189.81	1,189.92	1,180.85	9.07	131.221	
1,400.00	1,400.00	1,369.97	1,369.95	4.92	4.79	90.049	-1.02	1,191.51	1,191.94	1,182.23	9.71	122.775	
1,500.00	1,500.00	1,454.03	1,453.94	5.28	5.07	90.112	-2.34	1,194.33	1,195.30	1,184.95	10.35	115.521	
1,600.00	1,600.00	1,537.97	1,537.77	5.64	5.36	90.199	-4.17	1,198.26	1,199.98	1,189.00	10.99	109.237	
1,700.00	1,700.00	1,621.77	1,621.39	6.00	5.65	90.310	-6.52	1,203.29	1,206.00	1,194.38	11.62	103.766	
1,800.00	1,800.00	1,700.00	1,699.37	6.36	5.92	90.435	-9.18	1,208.98	1,213.37	1,201.13	12.24	99.166	
1,900.00	1,900.00	1,788.79	1,787.75	6.72	6.23	90.600	-12.74	1,216.62	1,222.03	1,209.14	12.89	94.797	
2,000.00	2,000.00	1,871.94	1,870.40	7.07	6.52	90.777	-16.60	1,224.89	1,232.05	1,218.53	13.52	91.113	
2,100.00	2,100.00	1,954.81	1,952.63	7.43	6.81	90.973	-20.95	1,234.21	1,243.40	1,229.25	14.15	87.872	
2,200.00	2,200.00	2,037.37	2,034.39	7.79	7.10	91.187	-25.79	1,244.57	1,256.07	1,241.30	14.77	85.016	
2,300.00	2,300.00	2,119.57	2,115.63	8.15	7.39	91.418	-31.10	1,255.95	1,270.08	1,254.69	15.40	82.500	
2,400.00	2,400.00	2,200.00	2,194.93	8.51	7.68	91.661	-36.77	1,268.10	1,285.42	1,269.42	16.00	80.317	
2,500.00	2,500.00	2,282.81	2,276.38	8.87	7.98	91.926	-43.10	1,281.67	1,302.09	1,285.46	16.62	78.330	
2,600.00	2,600.00	2,371.55	2,363.43	9.23	8.30	92.224	-50.37	1,297.23	1,319.95	1,302.68	17.27	76.425	
2,700.00	2,700.00	2,469.62	2,459.61	9.58	8.66	92.547	-58.48	1,314.60	1,338.04	1,320.07	17.97	74.462	
2,800.00	2,800.00	2,567.69	2,555.79	9.94	9.02	92.862	-66.59	1,331.98	1,356.18	1,337.51	18.67	72.644	
2,900.00	2,900.00	2,665.76	2,651.97	10.30	9.38	93.168	-74.69	1,349.35	1,374.35	1,354.98	19.37	70.956	
3,000.00	3,000.00	2,763.83	2,748.15	10.66	9.74	93.467	-82.80	1,366.72	1,392.56	1,372.49	20.07	69.384	
3,100.00	3,099.99	2,861.71	2,844.14	11.01	10.11	93.735	-90.90	1,384.06	1,411.97	1,391.21	20.76	68.015	
3,200.00	3,199.91	2,959.17	2,939.72	11.34	10.47	93.948	-98.96	1,401.33	1,433.72	1,412.29	21.44	66.880	
3,300.00	3,299.69	3,056.15	3,034.83	11.68	10.83	94.109	-106.97	1,418.51	1,457.79	1,435.68	22.11	65.924	
3,400.00	3,399.27	3,152.57	3,129.39	12.02	11.19	94.218	-114.95	1,435.59	1,484.14	1,461.36	22.79	65.131	
3,500.00	3,498.57	3,248.37	3,223.34	12.36	11.55	94.279	-122.87	1,452.56	1,512.76	1,489.30	23.46	64.487	
3,600.00	3,597.54	3,343.49	3,316.63	12.70	11.91	94.293	-130.73	1,469.41	1,543.61	1,519.48	24.13	63.980	
3,700.00	3,696.09	3,437.86	3,409.17	13.04	12.27	94.264	-138.54	1,486.12	1,576.68	1,551.89	24.79	63.600	
3,800.00	3,794.16	3,531.41	3,500.92	13.39	12.62	94.193	-146.27	1,502.70	1,611.94	1,586.49	25.45	63.336	
3,900.00	3,891.70	3,624.09	3,591.80	13.74	12.97	94.084	-153.93	1,519.11	1,649.38	1,623.28	26.11	63.180	
4,000.00	3,988.62	3,715.82	3,681.77	14.09	13.32	93.940	-161.52	1,535.36	1,688.98	1,662.22	26.76	63.125	
4,100.00	4,085.12	3,806.93	3,771.12	14.44	13.67	93.779	-169.05	1,551.50	1,729.92	1,702.52	27.40	63.130	
4,200.00	4,181.62	3,898.03	3,860.46	14.80	14.01	93.625	-176.58	1,567.64	1,770.90	1,742.85	28.05	63.136	
4,300.00	4,278.12	3,989.12	3,949.80	15.16	14.36	93.477	-184.12	1,583.78	1,811.89	1,783.20	28.70	63.137	
4,400.00	4,374.62	4,080.22	4,039.14	15.52	14.70	93.336	-191.65	1,599.92	1,852.89	1,823.55	29.35	63.135	
4,500.00	4,471.12	4,171.32	4,128.48	15.89	15.05	93.202	-199.18	1,616.06	1,893.91	1,863.91	30.00	63.129	
4,600.00	4,567.62	4,262.42	4,217.83	16.26	15.40	93.073	-206.71	1,632.19	1,934.93	1,904.27	30.65	63.121	
4,700.00	4,664.11	4,353.52	4,307.17	16.63	15.75	92.949	-214.25	1,648.33	1,975.96	1,944.65	31.31	63.110 SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp E2-1 (113H,116H,123H,124H,126H) - Double Stamp Fed Com 126H - Wellbore #1 - Design #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	2.00	2.00	0.00	0.01	89.998	0.04	1,109.23	1,109.23				
100.00	100.00	102.00	102.00	0.26	0.27	89.998	0.04	1,109.23	1,109.23	1,108.69	0.53	2,076.722	
200.00	200.00	202.00	202.00	0.62	0.63	89.998	0.04	1,109.23	1,109.23	1,107.97	1.25	886.624	
300.00	300.00	302.00	302.00	0.98	0.99	89.998	0.04	1,109.23	1,109.23	1,107.26	1.97	563.628	
400.00	400.00	402.00	402.00	1.34	1.35	89.998	0.04	1,109.23	1,109.23	1,106.54	2.68	413.127	
465.99	465.99	467.99	467.99	1.58	1.58	89.998	0.04	1,109.23	1,109.23	1,106.07	3.16	351.239 CC	
500.00	500.00	500.00	500.00	1.70	1.70	89.998	0.04	1,109.23	1,109.23	1,105.83	3.39	326.750	
600.00	600.00	588.82	588.82	2.06	2.00	90.021	-0.40	1,109.75	1,109.83	1,105.77	4.06	273.414 ES	
700.00	700.00	675.86	675.83	2.41	2.30	90.087	-1.69	1,111.29	1,111.60	1,106.89	4.71	235.949	
800.00	800.00	762.81	762.72	2.77	2.60	90.197	-3.83	1,113.84	1,114.54	1,109.18	5.37	207.742	
900.00	900.00	844.24	844.03	3.13	2.88	90.334	-6.52	1,117.27	1,118.79	1,112.79	6.00	186.402	
1,000.00	1,000.00	921.45	921.04	3.49	3.15	90.476	-9.32	1,122.02	1,124.98	1,118.36	6.62	169.827	
1,100.00	1,100.00	1,000.00	999.27	3.85	3.42	90.627	-12.35	1,128.45	1,133.18	1,125.93	7.25	156.286	
1,200.00	1,200.00	1,075.10	1,073.91	4.21	3.69	90.778	-15.42	1,136.08	1,143.39	1,135.52	7.86	145.430	
1,300.00	1,300.00	1,151.42	1,149.59	4.57	3.97	90.936	-18.71	1,145.34	1,155.58	1,147.11	8.48	136.352	
1,400.00	1,400.00	1,227.32	1,224.66	4.92	4.24	91.099	-22.17	1,156.02	1,169.76	1,160.67	9.08	128.777	
1,500.00	1,500.00	1,300.00	1,296.32	5.28	4.51	91.258	-25.63	1,167.65	1,185.90	1,176.23	9.67	122.624	
1,600.00	1,600.00	1,377.66	1,372.63	5.64	4.79	91.431	-29.51	1,181.56	1,203.98	1,193.70	10.28	117.147	
1,700.00	1,700.00	1,452.00	1,445.38	6.00	5.07	91.598	-33.38	1,196.32	1,223.99	1,213.13	10.87	112.653	
1,800.00	1,800.00	1,525.70	1,517.21	6.36	5.34	91.766	-37.38	1,212.34	1,245.91	1,234.46	11.44	108.863	
1,900.00	1,900.00	1,600.00	1,589.28	6.72	5.63	91.936	-41.57	1,229.89	1,269.70	1,257.68	12.02	105.610	
2,000.00	2,000.00	1,671.06	1,657.88	7.07	5.90	92.098	-45.73	1,247.97	1,295.35	1,282.77	12.58	102.982	
2,100.00	2,100.00	1,760.17	1,743.57	7.43	6.24	92.299	-51.07	1,271.84	1,322.37	1,309.14	13.23	99.958	
2,200.00	2,200.00	1,856.31	1,835.99	7.79	6.62	92.508	-56.84	1,297.66	1,349.48	1,335.56	13.92	96.946	
2,300.00	2,300.00	1,952.45	1,928.42	8.15	7.00	92.709	-62.61	1,323.47	1,376.61	1,362.00	14.61	94.213	
2,400.00	2,400.00	2,048.59	2,020.85	8.51	7.38	92.901	-68.39	1,349.29	1,403.76	1,388.45	15.30	91.722	
2,500.00	2,500.00	2,144.73	2,113.28	8.87	7.76	93.087	-74.16	1,375.11	1,430.92	1,414.92	16.00	89.442	
2,600.00	2,600.00	2,240.87	2,205.71	9.23	8.14	93.265	-79.93	1,400.92	1,458.09	1,441.40	16.69	87.349	
2,700.00	2,700.00	2,337.01	2,298.14	9.58	8.53	93.438	-85.70	1,426.74	1,485.27	1,467.89	17.39	85.421	
2,800.00	2,800.00	2,433.15	2,390.57	9.94	8.91	93.603	-91.47	1,452.56	1,512.47	1,494.39	18.08	83.639	
2,900.00	2,900.00	2,529.29	2,482.99	10.30	9.30	93.763	-97.25	1,478.37	1,539.68	1,520.90	18.78	81.987	
3,000.00	3,000.00	2,625.43	2,575.42	10.66	9.69	93.918	-103.02	1,504.19	1,566.90	1,547.42	19.48	80.453	
3,100.00	3,099.99	2,721.26	2,667.55	11.01	10.08	94.046	-108.77	1,529.92	1,595.26	1,575.10	20.16	79.128	
3,200.00	3,199.91	2,816.43	2,759.05	11.34	10.47	94.127	-114.49	1,555.48	1,625.89	1,605.05	20.83	78.048	
3,300.00	3,299.69	2,910.87	2,849.84	11.68	10.85	94.163	-120.16	1,580.84	1,658.75	1,637.25	21.50	77.151	
3,400.00	3,399.27	3,004.51	2,939.87	12.02	11.23	94.158	-125.78	1,605.99	1,693.82	1,671.65	22.16	76.422	
3,500.00	3,498.57	3,097.30	3,029.08	12.36	11.61	94.112	-131.35	1,630.90	1,731.07	1,708.25	22.82	75.845	
3,600.00	3,597.54	3,189.17	3,117.40	12.70	11.99	94.030	-136.86	1,655.57	1,770.49	1,747.01	23.48	75.409	
3,700.00	3,696.09	3,280.05	3,204.77	13.04	12.36	93.914	-142.32	1,679.98	1,812.05	1,787.93	24.13	75.103	
3,800.00	3,794.16	3,369.89	3,291.14	13.39	12.73	93.767	-147.72	1,704.10	1,855.73	1,830.96	24.77	74.915	
3,900.00	3,891.70	3,458.62	3,376.45	13.74	13.09	93.591	-153.04	1,727.93	1,901.51	1,876.10	25.41	74.839 SF	
4,000.00	3,988.62	3,546.18	3,460.63	14.09	13.45	93.389	-158.30	1,751.44	1,949.36	1,923.32	26.04	74.865	
4,100.00	4,085.12	3,632.98	3,544.08	14.44	13.81	93.176	-163.51	1,774.75	1,998.51	1,971.85	26.66	74.953	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 111H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned:		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-76.599	25.04	-105.11	108.06				
100.00	100.00	100.00	100.00	0.26	0.26	-76.599	25.04	-105.11	108.06	107.53	0.53	205.059	
200.00	200.00	200.00	200.00	0.62	0.62	-76.599	25.04	-105.11	108.06	106.81	1.24	86.870	
300.00	300.00	300.00	300.00	0.98	0.98	-76.599	25.04	-105.11	108.06	106.10	1.96	55.107	
400.00	400.00	400.00	400.00	1.34	1.34	-76.599	25.04	-105.11	108.06	105.38	2.68	40.353	
500.00	500.00	500.00	500.00	1.70	1.70	-76.599	25.04	-105.11	108.06	104.66	3.39	31.831	
600.00	600.00	600.00	600.00	2.06	2.06	-76.599	25.04	-105.11	108.06	103.95	4.11	26.281	
700.00	700.00	700.00	700.00	2.41	2.41	-76.599	25.04	-105.11	108.06	103.23	4.83	22.378	
800.00	800.00	800.00	800.00	2.77	2.77	-76.599	25.04	-105.11	108.06	102.51	5.55	19.485 CC	
900.00	900.00	897.62	897.61	3.13	3.11	-76.940	24.66	-106.30	109.15	102.91	6.24	17.486	
1,000.00	1,000.00	995.11	995.03	3.49	3.44	-77.923	23.50	-109.85	112.45	105.52	6.93	16.231	
1,100.00	1,100.00	1,092.35	1,092.07	3.85	3.78	-79.435	21.59	-115.75	118.01	110.40	7.61	15.502	
1,200.00	1,200.00	1,189.22	1,188.54	4.21	4.11	-81.321	18.92	-123.96	125.92	117.62	8.29	15.181	
1,300.00	1,300.00	1,285.58	1,284.27	4.57	4.45	-83.414	15.52	-134.43	136.23	127.26	8.97	15.187	
1,400.00	1,400.00	1,381.32	1,379.08	4.92	4.79	-85.568	11.40	-147.10	149.02	139.38	9.64	15.461	
1,500.00	1,500.00	1,476.34	1,472.81	5.28	5.13	-87.670	6.59	-161.91	164.31	154.02	10.30	15.958	
1,600.00	1,600.00	1,570.51	1,565.30	5.64	5.48	-89.644	1.11	-178.77	182.11	171.17	10.95	16.637	
1,700.00	1,700.00	1,663.75	1,656.41	6.00	5.82	-91.451	-5.01	-197.60	202.41	190.83	11.58	17.474	
1,800.00	1,800.00	1,755.95	1,746.00	6.36	6.16	-93.075	-11.73	-218.29	225.17	212.96	12.21	18.444	
1,900.00	1,900.00	1,850.03	1,836.94	6.72	6.52	-94.546	-19.18	-241.21	250.06	237.20	12.86	19.445	
2,000.00	2,000.00	1,946.62	1,930.24	7.07	6.89	-95.797	-26.90	-264.99	275.33	261.79	13.55	20.327	
2,100.00	2,100.00	2,043.22	2,023.55	7.43	7.26	-96.838	-34.63	-288.77	300.72	286.48	14.23	21.128	
2,200.00	2,200.00	2,139.81	2,116.85	7.79	7.63	-97.717	-42.35	-312.54	326.18	311.25	14.92	21.858	
2,300.00	2,300.00	2,236.40	2,210.15	8.15	8.01	-98.469	-50.08	-336.32	351.70	336.09	15.61	22.526	
2,400.00	2,400.00	2,332.99	2,303.45	8.51	8.39	-99.120	-57.80	-360.10	377.27	360.96	16.30	23.139	
2,500.00	2,500.00	2,429.59	2,396.75	8.87	8.77	-99.687	-65.53	-383.87	402.88	385.88	17.00	23.703	
2,600.00	2,600.00	2,526.18	2,490.05	9.23	9.15	-100.187	-73.25	-407.65	428.52	410.83	17.69	24.223	
2,700.00	2,700.00	2,622.77	2,583.35	9.58	9.53	-100.631	-80.98	-431.42	454.19	435.81	18.39	24.704	
2,800.00	2,800.00	2,719.36	2,676.65	9.94	9.92	-101.027	-88.71	-455.20	479.89	460.81	19.08	25.151	
2,900.00	2,900.00	2,815.96	2,769.96	10.30	10.30	-101.383	-96.43	-478.98	505.60	485.82	19.78	25.567	
3,000.00	3,000.00	2,912.55	2,863.26	10.66	10.69	-101.704	-104.16	-502.75	531.33	510.86	20.47	25.954	
3,100.00	3,099.99	3,009.47	2,956.87	11.01	11.08	-101.975	-111.91	-526.61	555.82	534.66	21.16	26.271	
3,200.00	3,199.91	3,107.00	3,051.08	11.34	11.47	-102.181	-119.71	-550.62	577.81	555.97	21.83	26.463	
3,300.00	3,299.69	3,205.07	3,145.81	11.68	11.86	-102.333	-127.55	-574.76	597.27	574.76	22.52	26.525	
3,400.00	3,399.27	3,303.62	3,241.00	12.02	12.26	-102.437	-135.43	-599.02	614.20	590.99	23.21	26.468	
3,500.00	3,498.57	3,402.58	3,336.59	12.36	12.66	-102.499	-143.35	-623.38	628.57	604.67	23.90	26.304	
3,600.00	3,597.54	3,501.88	3,432.50	12.70	13.06	-102.523	-151.29	-647.82	640.37	615.78	24.59	26.040	
3,700.00	3,696.09	3,602.27	3,529.48	13.04	13.46	-102.523	-159.43	-672.48	649.58	624.29	25.30	25.678	
3,800.00	3,794.16	3,704.82	3,628.55	13.39	13.88	-102.676	-169.67	-696.91	655.90	629.88	26.02	25.206	
3,900.00	3,891.70	3,804.84	3,725.16	13.74	14.28	-102.911	-181.01	-720.18	659.40	632.68	26.72	24.677	
4,000.00	3,988.62	3,904.81	3,821.72	14.09	14.69	-103.111	-192.34	-743.44	660.33	632.90	27.42	24.081	
4,100.00	4,085.12	4,004.79	3,918.29	14.44	15.09	-103.291	-203.67	-766.71	659.63	631.51	28.12	23.456	
4,200.00	4,181.62	4,104.77	4,014.86	14.80	15.50	-103.470	-215.00	-789.97	658.91	630.09	28.82	22.859	
4,300.00	4,278.12	4,204.74	4,111.43	15.16	15.90	-103.650	-226.33	-813.23	658.20	628.67	29.53	22.290	
4,400.00	4,374.62	4,304.72	4,208.01	15.52	16.31	-103.831	-237.67	-836.49	657.50	627.26	30.23	21.747	
4,500.00	4,471.12	4,404.70	4,304.58	15.89	16.71	-104.011	-249.00	-859.76	656.80	625.86	30.94	21.227	
4,600.00	4,567.62	4,504.68	4,401.15	16.26	17.12	-104.192	-260.33	-883.02	656.11	624.46	31.65	20.730	
4,700.00	4,664.11	4,604.65	4,497.72	16.63	17.53	-104.374	-271.66	-906.28	655.42	623.06	32.36	20.255	
4,800.00	4,760.61	4,704.63	4,594.29	17.00	17.93	-104.556	-282.99	-929.54	654.74	621.67	33.07	19.799	
4,900.00	4,857.11	4,804.61	4,690.86	17.37	18.34	-104.738	-294.33	-952.81	654.07	620.29	33.78	19.362	
5,000.00	4,953.61	4,904.59	4,787.43	17.75	18.75	-104.921	-305.66	-976.07	653.40	618.91	34.49	18.943	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 111H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR														Offset Site Error:	0.00 usft
Reference Offset														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,100.00	5,050.11	5,004.56	4,884.00	18.12	19.16	-105.104	-316.99	-999.33	652.74	617.54	35.21	18.541			
5,200.00	5,146.61	5,104.54	4,980.57	18.50	19.56	-105.288	-328.32	-1,022.60	652.09	616.17	35.92	18.154			
5,300.00	5,243.11	5,204.52	5,077.14	18.88	19.97	-105.471	-339.65	-1,045.86	651.44	614.80	36.63	17.782			
5,400.00	5,339.61	5,304.49	5,173.71	19.26	20.38	-105.656	-350.98	-1,069.12	650.80	613.45	37.35	17.424			
5,500.00	5,436.11	5,404.47	5,270.28	19.65	20.79	-105.840	-362.32	-1,092.38	650.16	612.10	38.07	17.080			
5,600.00	5,532.60	5,504.45	5,366.85	20.03	21.20	-106.025	-373.65	-1,115.65	649.53	610.75	38.78	16.748			
5,700.00	5,629.10	5,604.43	5,463.43	20.41	21.61	-106.211	-384.98	-1,138.91	648.91	609.41	39.50	16.428			
5,800.00	5,725.60	5,704.40	5,560.00	20.80	22.01	-106.396	-396.31	-1,162.17	648.29	608.08	40.22	16.120			
5,900.00	5,822.10	5,804.38	5,656.57	21.19	22.42	-106.583	-407.64	-1,185.43	647.68	606.75	40.94	15.822			
6,000.00	5,918.60	5,904.36	5,753.14	21.58	22.83	-106.769	-418.98	-1,208.70	647.08	605.42	41.65	15.534			
6,100.00	6,015.10	6,004.34	5,849.71	21.96	23.24	-106.956	-430.31	-1,231.96	646.48	604.11	42.37	15.257			
6,200.00	6,111.60	6,113.47	5,955.23	22.35	23.69	-107.171	-442.51	-1,257.01	645.57	602.39	43.17	14.953			
6,300.00	6,208.10	6,233.39	6,071.94	22.74	24.16	-107.381	-454.57	-1,281.77	642.01	597.97	44.04	14.577			
6,400.00	6,304.59	6,352.95	6,189.09	23.14	24.63	-107.540	-465.00	-1,303.17	635.36	590.49	44.87	14.160			
6,500.00	6,401.09	6,471.91	6,306.35	23.53	25.08	-107.650	-473.77	-1,321.18	625.63	579.97	45.66	13.702			
6,600.00	6,497.59	6,590.05	6,423.36	23.92	25.52	-107.712	-480.89	-1,335.80	612.85	566.45	46.41	13.206			
6,700.00	6,594.09	6,707.15	6,539.79	24.32	25.94	-107.724	-486.39	-1,347.08	597.06	549.94	47.11	12.673			
6,800.00	6,690.59	6,823.02	6,655.31	24.71	26.34	-107.686	-490.28	-1,355.08	578.29	530.51	47.77	12.105			
6,900.00	6,787.09	6,937.46	6,769.62	25.10	26.73	-107.592	-492.62	-1,359.88	556.60	508.21	48.39	11.502			
7,000.00	6,883.59	7,050.30	6,882.43	25.50	27.10	-107.436	-493.46	-1,361.60	532.05	483.09	48.96	10.866			
7,100.00	6,980.09	7,147.95	6,980.09	25.90	27.40	-107.233	-493.47	-1,361.61	505.89	456.27	49.62	10.195			
7,200.00	7,076.59	7,244.45	7,076.59	26.29	27.70	-107.007	-493.47	-1,361.61	479.73	429.45	50.29	9.539			
7,300.00	7,173.08	7,340.95	7,173.08	26.69	28.00	-106.756	-493.47	-1,361.61	453.59	402.63	50.96	8.901			
7,400.00	7,269.58	7,437.45	7,269.58	27.09	28.30	-106.473	-493.47	-1,361.61	427.45	375.81	51.63	8.279			
7,500.00	7,366.08	7,533.95	7,366.08	27.49	28.60	-106.154	-493.47	-1,361.61	401.32	349.01	52.31	7.672			
7,600.00	7,462.58	7,630.44	7,462.58	27.88	28.90	-105.791	-493.47	-1,361.61	375.21	322.22	52.98	7.081			
7,700.00	7,559.08	7,726.94	7,559.08	28.28	29.21	-105.373	-493.47	-1,361.61	349.11	295.45	53.66	6.506			
7,800.00	7,655.58	7,823.44	7,655.58	28.68	29.51	-104.887	-493.47	-1,361.61	323.03	268.69	54.35	5.944			
7,900.00	7,752.08	7,919.94	7,752.08	29.08	29.82	-104.316	-493.47	-1,361.61	296.99	241.96	55.03	5.397			
8,000.00	7,848.58	8,016.44	7,848.58	29.48	30.13	-103.636	-493.47	-1,361.61	270.98	215.25	55.72	4.863			
8,100.00	7,945.08	8,112.94	7,945.08	29.88	30.43	-102.811	-493.47	-1,361.61	245.01	188.59	56.42	4.343			
8,200.00	8,041.64	8,209.51	8,041.64	30.28	30.74	-101.803	-493.47	-1,361.61	219.36	162.23	57.13	3.840			
8,300.00	8,138.76	8,306.63	8,138.76	30.68	31.05	-100.646	-493.47	-1,361.61	195.91	138.07	57.84	3.387			
8,400.00	8,236.47	8,404.33	8,236.47	31.07	31.37	-99.351	-493.47	-1,361.61	175.06	116.48	58.57	2.989			
8,500.00	8,334.70	8,503.70	8,335.82	31.45	31.69	-97.603	-492.57	-1,361.62	156.70	97.42	59.28	2.643			
8,600.00	8,433.39	8,602.42	8,433.42	31.83	31.99	-90.361	-478.59	-1,361.69	140.38	80.02	60.35	2.326			
8,700.00	8,532.47	8,692.76	8,519.45	32.19	32.25	-76.234	-451.30	-1,361.84	132.34	70.10	62.24	2.126			
8,704.45	8,536.88	8,696.54	8,522.94	32.21	32.26	-75.493	-449.87	-1,361.85	132.35	70.03	62.32	2.124 ES, SF			
8,800.00	8,631.86	8,772.28	8,590.81	32.56	32.45	-59.208	-416.35	-1,362.03	143.28	80.36	62.92	2.277			
8,900.00	8,731.51	8,840.59	8,647.74	32.91	32.59	-44.843	-378.69	-1,362.24	177.52	116.87	60.64	2.927			
9,000.00	8,831.35	8,900.00	8,693.32	33.26	32.70	-34.854	-340.62	-1,362.45	230.15	172.90	57.24	4.021			
9,100.00	8,931.30	8,950.00	8,728.45	33.61	32.78	-28.635	-305.07	-1,362.64	294.85	240.88	53.97	5.464			
9,200.00	9,031.29	8,989.29	8,753.80	33.94	32.83	-25.099	-275.06	-1,362.81	367.39	316.42	50.97	7.208			
9,300.00	9,131.29	9,024.53	8,774.74	34.27	32.87	-22.547	-246.73	-1,362.96	445.30	396.59	48.71	9.142			
9,400.00	9,231.06	9,050.00	8,788.77	34.59	32.89	-21.178	-225.48	-1,363.08	524.26	477.89	46.37	11.307			
9,500.00	9,328.48	9,100.00	8,813.51	34.90	32.93	-19.194	-182.04	-1,363.32	596.40	551.12	45.28	13.172			
9,600.00	9,420.59	9,127.04	8,825.28	35.18	32.95	-19.130	-157.70	-1,363.45	660.46	617.53	42.93	15.383			
9,700.00	9,504.61	9,164.33	8,839.60	35.42	32.96	-19.004	-123.28	-1,363.64	716.10	674.98	41.13	17.412			
9,800.00	9,577.97	9,200.00	8,851.18	35.60	32.97	-19.559	-89.54	-1,363.83	762.66	723.27	39.39	19.362			
9,900.00	9,638.46	9,250.00	8,863.83	35.72	32.98	-19.595	-41.19	-1,364.09	799.76	761.55	38.22	20.926			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 111H - Wellbore #1 - Design #1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning		
							+N/-S (usft)	+E/-W (usft)							
10,000.00	9,684.22	9,280.86	8,869.51	35.79	32.98	-22.843	-10.86	-1,364.26	826.79	789.91	36.88	22.419			
10,100.00	9,713.87	9,320.56	8,874.41	35.81	32.98	-29.212	28.53	-1,364.47	843.82	807.69	36.12	23.360			
10,200.00	9,726.51	9,360.43	8,876.57	35.81	32.97	-59.987	68.33	-1,364.69	850.57	814.75	35.82	23.746			
10,300.00	9,726.69	9,438.66	8,876.33	35.80	32.96	-105.796	146.56	-1,365.12	850.52	814.70	35.82	23.748			
10,316.50	9,726.63	9,455.08	8,876.25	35.80	32.95	-107.525	162.97	-1,365.21	850.52	814.70	35.82	23.745			
10,400.00	9,726.34	9,538.27	8,875.81	35.79	32.94	-121.975	246.16	-1,365.67	850.57	814.70	35.87	23.715			
10,500.00	9,725.98	9,638.12	8,875.29	35.78	32.94	-157.766	346.01	-1,366.21	850.71	814.70	36.00	23.628			
10,600.00	9,725.63	9,738.09	8,874.77	35.77	32.93	-179.231	445.98	-1,366.76	850.87	814.65	36.23	23.488			
10,700.00	9,725.27	9,838.09	8,874.24	35.76	32.94	-179.329	545.98	-1,367.31	851.04	814.54	36.50	23.316			
10,800.00	9,724.91	9,938.09	8,873.72	35.75	32.96	-179.468	645.98	-1,367.86	851.21	814.41	36.80	23.133			
10,900.00	9,724.56	10,038.09	8,873.20	35.75	33.00	-179.608	745.97	-1,368.40	851.37	814.26	37.11	22.941			
11,000.00	9,724.20	10,138.09	8,872.67	35.75	33.09	-179.748	845.97	-1,368.95	851.54	814.09	37.45	22.741			
11,100.00	9,723.84	10,238.09	8,872.15	35.95	33.25	-179.887	945.97	-1,369.50	851.70	813.91	37.80	22.533			
11,200.00	9,723.48	10,338.09	8,871.62	36.22	33.49	-179.973	1,045.96	-1,370.05	851.87	813.70	38.17	22.317			
11,300.00	9,723.13	10,438.09	8,871.10	36.50	33.76	-179.834	1,145.96	-1,370.60	852.04	813.48	38.56	22.096			
11,400.00	9,722.77	10,538.09	8,870.58	36.80	34.07	-179.695	1,245.96	-1,371.14	852.20	813.24	38.97	21.870			
11,500.00	9,722.41	10,638.09	8,870.05	37.12	34.40	-179.555	1,345.95	-1,371.69	852.37	812.98	39.39	21.639			
11,600.00	9,722.06	10,738.09	8,869.53	37.45	34.76	-179.416	1,445.95	-1,372.24	852.54	812.71	39.83	21.404			
11,700.00	9,721.70	10,838.09	8,869.01	37.80	35.13	-179.277	1,545.95	-1,372.79	852.70	812.42	40.29	21.166			
11,800.00	9,721.34	10,938.09	8,868.48	38.17	35.52	-179.138	1,645.95	-1,373.33	852.87	812.11	40.76	20.925			
11,900.00	9,720.98	11,038.09	8,867.96	38.55	35.93	-178.999	1,745.94	-1,373.88	853.04	811.79	41.24	20.683			
12,000.00	9,720.63	11,138.09	8,867.44	38.95	36.36	-178.860	1,845.94	-1,374.43	853.20	811.46	41.74	20.439			
12,100.00	9,720.27	11,238.09	8,866.91	39.37	36.80	-178.721	1,945.94	-1,374.98	853.37	811.11	42.26	20.195			
12,200.00	9,719.91	11,338.09	8,866.39	39.79	37.25	-178.582	2,045.93	-1,375.53	853.54	810.75	42.78	19.950			
12,300.00	9,719.55	11,438.09	8,865.86	40.24	37.72	-178.443	2,145.93	-1,376.07	853.70	810.38	43.32	19.706			
12,400.00	9,719.20	11,538.09	8,865.34	40.69	38.21	-178.305	2,245.93	-1,376.62	853.87	809.99	43.87	19.462			
12,500.00	9,718.84	11,638.09	8,864.82	41.16	38.70	-178.166	2,345.92	-1,377.17	854.03	809.60	44.44	19.219			
12,600.00	9,718.48	11,738.09	8,864.29	41.64	39.21	-178.028	2,445.92	-1,377.72	854.20	809.19	45.01	18.977			
12,700.00	9,718.13	11,838.09	8,863.77	42.13	39.74	-177.889	2,545.92	-1,378.27	854.37	808.77	45.60	18.737			
12,800.00	9,717.77	11,938.09	8,863.25	42.64	40.27	-177.751	2,645.92	-1,378.81	854.53	808.34	46.19	18.499			
12,900.00	9,717.41	12,038.09	8,862.72	43.15	40.82	-177.612	2,745.91	-1,379.36	854.70	807.90	46.80	18.263			
13,000.00	9,717.05	12,138.09	8,862.20	43.68	41.37	-177.474	2,845.91	-1,379.91	854.87	807.45	47.41	18.030			
13,100.00	9,716.70	12,238.09	8,861.67	44.22	41.94	-177.336	2,945.91	-1,380.46	855.03	806.99	48.04	17.799			
13,200.00	9,716.34	12,338.09	8,861.15	44.77	42.52	-177.198	3,045.90	-1,381.01	855.20	806.53	48.67	17.570			
13,300.00	9,715.98	12,438.09	8,860.63	45.32	43.11	-177.060	3,145.90	-1,381.55	855.37	806.05	49.32	17.345			
13,400.00	9,715.62	12,538.09	8,860.10	45.89	43.70	-176.922	3,245.90	-1,382.10	855.53	805.57	49.97	17.122			
13,500.00	9,715.27	12,638.09	8,859.58	46.47	44.31	-176.785	3,345.89	-1,382.65	855.70	805.08	50.62	16.903			
13,600.00	9,714.91	12,738.09	8,859.06	47.05	44.92	-176.647	3,445.89	-1,383.20	855.87	804.58	51.29	16.687			
13,700.00	9,714.55	12,838.09	8,858.53	47.65	45.54	-176.510	3,545.89	-1,383.75	856.03	804.07	51.96	16.474			
13,800.00	9,714.20	12,938.09	8,858.01	48.25	46.17	-176.372	3,645.89	-1,384.29	856.20	803.55	52.64	16.264			
13,900.00	9,713.84	13,038.09	8,857.49	48.86	46.81	-176.235	3,745.88	-1,384.84	856.37	803.03	53.33	16.057			
14,000.00	9,713.48	13,138.09	8,856.96	49.48	47.46	-176.098	3,845.88	-1,385.39	856.53	802.51	54.03	15.854			
14,100.00	9,713.12	13,238.09	8,856.44	50.10	48.11	-175.960	3,945.88	-1,385.94	856.70	801.97	54.73	15.654			
14,200.00	9,712.77	13,338.09	8,855.91	50.73	48.77	-175.823	4,045.87	-1,386.49	856.86	801.43	55.43	15.458			
14,300.00	9,712.41	13,438.09	8,855.39	51.37	49.43	-175.686	4,145.87	-1,387.03	857.03	800.89	56.14	15.265			
14,400.00	9,712.05	13,538.09	8,854.87	52.02	50.10	-175.550	4,245.87	-1,387.58	857.20	800.34	56.86	15.075			
14,500.00	9,711.70	13,638.09	8,854.34	52.67	50.78	-175.413	4,345.86	-1,388.13	857.36	799.78	57.58	14.889			
14,600.00	9,711.34	13,738.09	8,853.82	53.33	51.46	-175.276	4,445.86	-1,388.68	857.53	799.22	58.31	14.706			
14,700.00	9,710.98	13,838.09	8,853.30	53.99	52.15	-175.140	4,545.86	-1,389.22	857.70	798.65	59.05	14.526			
14,800.00	9,710.62	13,938.09	8,852.77	54.66	52.84	-175.003	4,645.86	-1,389.77	857.86	798.08	59.78	14.349			
14,900.00	9,710.27	14,038.09	8,852.25	55.34	53.54	-174.867	4,745.85	-1,390.32	858.03	797.50	60.53	14.176			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 111H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR														Offset Site Error: 0.00 usft
Reference Offset				Semi Major Axis		Offset Wellbore Centre			Rule Assigned: Distance				Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,000.00	9,709.91	14,138.09	8,851.72	56.02	54.24	-174.731	4,845.85	-1,390.87	858.20	796.92	61.27	14.006		
15,100.00	9,709.55	14,238.09	8,851.20	56.70	54.95	-174.595	4,945.85	-1,391.42	858.36	796.34	62.03	13.839		
15,200.00	9,709.19	14,338.09	8,850.68	57.39	55.66	-174.459	5,045.84	-1,391.96	858.53	795.75	62.78	13.675		
15,300.00	9,708.84	14,438.09	8,850.15	58.09	56.38	-174.323	5,145.84	-1,392.51	858.70	795.15	63.54	13.514		
15,400.00	9,708.48	14,538.09	8,849.63	58.79	57.10	-174.188	5,245.84	-1,393.06	858.86	794.56	64.30	13.356		
15,500.00	9,708.12	14,638.09	8,849.11	59.49	57.83	-174.052	5,345.83	-1,393.61	859.03	793.96	65.07	13.201		
15,600.00	9,707.77	14,738.09	8,848.58	60.20	58.55	-173.917	5,445.83	-1,394.16	859.19	793.35	65.84	13.049		
15,700.00	9,707.41	14,838.09	8,848.06	60.91	59.29	-173.781	5,545.83	-1,394.70	859.36	792.74	66.62	12.900		
15,800.00	9,707.05	14,938.09	8,847.54	61.63	60.02	-173.646	5,645.83	-1,395.25	859.53	792.13	67.39	12.754		
15,900.00	9,706.69	15,038.09	8,847.01	62.35	60.76	-173.511	5,745.82	-1,395.80	859.69	791.52	68.18	12.610		
16,000.00	9,706.34	15,138.09	8,846.49	63.07	61.51	-173.376	5,845.82	-1,396.35	859.86	790.90	68.96	12.469		
16,100.00	9,705.98	15,238.09	8,845.96	63.80	62.25	-173.241	5,945.82	-1,396.90	860.03	790.28	69.75	12.331		
16,200.00	9,705.62	15,338.09	8,845.44	64.53	63.00	-173.107	6,045.81	-1,397.44	860.19	789.66	70.54	12.195		
16,300.00	9,705.27	15,438.09	8,844.92	65.27	63.75	-172.972	6,145.81	-1,397.99	860.36	789.03	71.33	12.062		
16,400.00	9,704.91	15,538.08	8,844.39	66.00	64.51	-172.838	6,245.81	-1,398.54	860.53	788.40	72.12	11.931		
16,500.00	9,704.55	15,638.08	8,843.87	66.74	65.27	-172.703	6,345.80	-1,399.09	860.69	787.77	72.92	11.803		
16,600.00	9,704.19	15,738.08	8,843.35	67.49	66.03	-172.569	6,445.80	-1,399.64	860.86	787.14	73.72	11.677		
16,700.00	9,703.84	15,838.08	8,842.82	68.23	66.79	-172.435	6,545.80	-1,400.18	861.03	786.50	74.53	11.553		
16,800.00	9,703.48	15,938.08	8,842.30	68.98	67.56	-172.301	6,645.80	-1,400.73	861.19	785.86	75.33	11.432		
16,900.00	9,703.12	16,038.08	8,841.78	69.73	68.32	-172.168	6,745.79	-1,401.28	861.36	785.22	76.14	11.313		
17,000.00	9,702.76	16,138.08	8,841.25	70.49	69.09	-172.034	6,845.79	-1,401.83	861.52	784.57	76.95	11.196		
17,100.00	9,702.41	16,238.08	8,840.73	71.25	69.87	-171.901	6,945.79	-1,402.37	861.69	783.93	77.76	11.081		
17,200.00	9,702.05	16,338.08	8,840.20	72.01	70.64	-171.767	7,045.78	-1,402.92	861.86	783.28	78.58	10.968		
17,300.00	9,701.69	16,438.08	8,839.68	72.77	71.42	-171.634	7,145.78	-1,403.47	862.02	782.63	79.39	10.858		
17,400.00	9,701.34	16,538.08	8,839.16	73.53	72.20	-171.501	7,245.78	-1,404.02	862.19	781.98	80.21	10.749		
17,500.00	9,700.98	16,638.08	8,838.63	74.30	72.98	-171.368	7,345.77	-1,404.57	862.36	781.32	81.03	10.642		
17,600.00	9,700.62	16,738.08	8,838.11	75.07	73.76	-171.235	7,445.77	-1,405.11	862.52	780.67	81.85	10.537		
17,700.00	9,700.26	16,838.08	8,837.59	75.84	74.55	-171.103	7,545.77	-1,405.66	862.69	780.01	82.68	10.434		
17,800.00	9,699.91	16,938.08	8,837.06	76.61	75.34	-170.971	7,645.76	-1,406.21	862.86	779.35	83.50	10.333		
17,900.00	9,699.55	17,038.08	8,836.54	77.39	76.12	-170.838	7,745.76	-1,406.76	863.02	778.69	84.33	10.234		
18,000.00	9,699.19	17,138.08	8,836.01	78.16	76.91	-170.706	7,845.76	-1,407.31	863.19	778.03	85.16	10.136		
18,100.00	9,698.83	17,238.08	8,835.49	78.94	77.71	-170.574	7,945.76	-1,407.85	863.36	777.36	85.99	10.040		
18,200.00	9,698.48	17,338.08	8,834.97	79.72	78.50	-170.442	8,045.75	-1,408.40	863.52	776.70	86.82	9.946		
18,300.00	9,698.12	17,438.08	8,834.44	80.51	79.29	-170.311	8,145.75	-1,408.95	863.69	776.03	87.66	9.853		
18,400.00	9,697.76	17,538.08	8,833.92	81.29	80.09	-170.179	8,245.75	-1,409.50	863.86	775.36	88.49	9.762		
18,500.00	9,697.41	17,638.08	8,833.40	82.08	80.89	-170.048	8,345.74	-1,410.05	864.02	774.69	89.33	9.672		
18,600.00	9,697.05	17,738.08	8,832.87	82.86	81.69	-169.917	8,445.74	-1,410.59	864.19	774.02	90.17	9.584		
18,700.00	9,696.69	17,838.08	8,832.35	83.65	82.49	-169.786	8,545.74	-1,411.14	864.35	773.35	91.01	9.497		
18,800.00	9,696.33	17,938.08	8,831.83	84.44	83.29	-169.655	8,645.73	-1,411.69	864.52	772.67	91.85	9.412		
18,900.00	9,695.98	18,038.08	8,831.30	85.24	84.09	-169.524	8,745.73	-1,412.24	864.69	772.00	92.69	9.329		
19,000.00	9,695.62	18,138.08	8,830.78	86.03	84.90	-169.394	8,845.73	-1,412.79	864.85	771.32	93.54	9.246		
19,100.00	9,695.26	18,238.08	8,830.25	86.82	85.71	-169.263	8,945.73	-1,413.33	865.02	770.64	94.38	9.165		
19,200.00	9,694.91	18,338.08	8,829.73	87.62	86.51	-169.133	9,045.72	-1,413.88	865.19	769.96	95.23	9.086		
19,300.00	9,694.55	18,438.08	8,829.21	88.42	87.32	-169.003	9,145.72	-1,414.43	865.35	769.28	96.07	9.007		
19,400.00	9,694.19	18,538.08	8,828.68	89.22	88.13	-168.873	9,245.72	-1,414.98	865.52	768.60	96.92	8.930		
19,500.00	9,693.83	18,638.08	8,828.16	90.02	88.94	-168.744	9,345.71	-1,415.52	865.69	767.92	97.77	8.854		
19,600.00	9,693.48	18,738.08	8,827.64	90.82	89.75	-168.614	9,445.71	-1,416.07	865.85	767.23	98.62	8.780		
19,700.00	9,693.12	18,838.08	8,827.11	91.62	90.57	-168.485	9,545.71	-1,416.62	866.02	766.55	99.47	8.706		
19,800.00	9,692.76	18,938.08	8,826.59	92.43	91.38	-168.356	9,645.70	-1,417.17	866.19	765.86	100.32	8.634		
19,900.00	9,692.40	19,038.08	8,826.06	93.23	92.19	-168.227	9,745.70	-1,417.72	866.35	765.18	101.18	8.563		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 111H - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:		Distance		Minimum Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor			
20,000.00	9,692.05	19,138.08	8,825.54	94.04	93.01	-168.098	9,845.70	-1,418.26	866.52	764.49	102.03	8.493		
20,100.00	9,691.69	19,238.08	8,825.02	94.84	93.83	-167.969	9,945.70	-1,418.81	866.68	763.80	102.89	8.424		
20,150.35	9,691.51	19,288.43	8,824.75	95.25	94.24	-167.904	9,996.04	-1,419.09	866.77	763.45	103.32	8.389		



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 115H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR										Rule Assigned:				Offset Site Error:
Reference Offset										Distance				Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.00	0.00	-72.640	25.04	-80.11	83.94					
100.00	100.00	100.00	100.00	0.26	0.26	-72.640	25.04	-80.11	83.94	83.41	0.53	159.289		
200.00	200.00	200.00	200.00	0.62	0.62	-72.640	25.04	-80.11	83.94	82.69	1.24	67.480		
300.00	300.00	300.00	300.00	0.98	0.98	-72.640	25.04	-80.11	83.94	81.98	1.96	42.807		
400.00	400.00	400.00	400.00	1.34	1.34	-72.640	25.04	-80.11	83.94	81.26	2.68	31.346		
500.00	500.00	500.00	500.00	1.70	1.70	-72.640	25.04	-80.11	83.94	80.54	3.39	24.726		
600.00	600.00	600.00	600.00	2.06	2.06	-72.640	25.04	-80.11	83.94	79.83	4.11	20.415		
700.00	700.00	700.00	700.00	2.41	2.41	-72.640	25.04	-80.11	83.94	79.11	4.83	17.383		
800.00	800.00	800.00	800.00	2.77	2.77	-72.640	25.04	-80.11	83.94	78.39	5.55	15.136		
900.00	900.00	900.00	900.00	3.13	3.13	-72.640	25.04	-80.11	83.94	77.68	6.26	13.403		
1,000.00	1,000.00	1,000.00	1,000.00	3.49	3.49	-72.640	25.04	-80.11	83.94	76.96	6.98	12.026		
1,100.00	1,100.00	1,100.00	1,100.00	3.85	3.85	-72.640	25.04	-80.11	83.94	76.24	7.70	10.906		
1,200.00	1,200.00	1,200.00	1,200.00	4.21	4.21	-72.640	25.04	-80.11	83.94	75.52	8.41	9.977		
1,300.00	1,300.00	1,300.00	1,300.00	4.57	4.57	-72.640	25.04	-80.11	83.94	74.81	9.13	9.193		
1,400.00	1,400.00	1,400.00	1,400.00	4.92	4.92	-72.640	25.04	-80.11	83.94	74.09	9.85	8.524		
1,500.00	1,500.00	1,500.00	1,500.00	5.28	5.28	-72.640	25.04	-80.11	83.94	73.37	10.56	7.946		
1,600.00	1,600.00	1,600.53	1,600.52	5.64	5.62	-73.202	24.16	-80.05	83.62	72.36	11.26	7.423		
1,700.00	1,700.00	1,701.00	1,700.96	6.00	5.95	-74.913	21.53	-79.86	82.71	70.77	11.95	6.922		
1,800.00	1,800.00	1,801.34	1,801.20	6.36	6.28	-77.837	17.14	-79.54	81.37	68.74	12.64	6.440		
1,900.00	1,900.00	1,901.50	1,901.17	6.72	6.61	-82.068	11.02	-79.09	79.87	66.54	13.33	5.993		
2,000.00	2,000.00	2,001.42	2,000.78	7.07	6.95	-87.684	3.18	-78.52	78.59	64.57	14.02	5.606		
2,093.27	2,093.27	2,094.34	2,093.27	7.41	7.26	-94.166	-5.67	-77.88	78.08	63.42	14.67	5.324 CC		
2,100.00	2,100.00	2,101.03	2,099.93	7.43	7.28	-94.677	-6.37	-77.83	78.09	63.37	14.71	5.307 ES		
2,200.00	2,200.00	2,200.48	2,198.83	7.79	7.62	-102.253	-16.74	-77.07	78.88	63.47	15.41	5.119		
2,300.00	2,300.00	2,299.93	2,297.74	8.15	7.96	-109.556	-27.11	-76.32	81.02	64.91	16.11	5.031		
2,400.00	2,400.00	2,399.38	2,396.65	8.51	8.30	-116.383	-37.48	-75.56	84.41	67.61	16.80	5.024 SF		
2,500.00	2,500.00	2,498.84	2,495.55	8.87	8.65	-122.607	-47.85	-74.81	88.91	71.42	17.50	5.082		
2,600.00	2,600.00	2,598.29	2,594.46	9.23	8.99	-128.177	-58.22	-74.05	94.36	76.17	18.19	5.186		
2,700.00	2,700.00	2,697.74	2,693.37	9.58	9.34	-133.103	-68.59	-73.29	100.60	81.71	18.89	5.325		
2,800.00	2,800.00	2,797.19	2,792.27	9.94	9.69	-137.429	-78.97	-72.54	107.50	87.91	19.59	5.488		
2,900.00	2,900.00	2,896.64	2,891.18	10.30	10.04	-141.218	-89.34	-71.78	114.94	94.65	20.29	5.665		
3,000.00	3,000.00	2,996.10	2,990.09	10.66	10.39	-144.535	-99.71	-71.03	122.82	101.83	20.99	5.852		
3,100.00	3,099.99	3,095.58	3,089.02	11.01	10.75	-147.788	-110.08	-70.27	130.01	108.33	21.68	5.998		
3,200.00	3,199.91	3,195.07	3,187.97	11.34	11.10	-151.398	-120.46	-69.52	135.56	113.20	22.35	6.064		
3,300.00	3,299.69	3,294.51	3,286.86	11.68	11.46	-155.452	-130.83	-68.76	139.70	116.67	23.03	6.066		
3,400.00	3,399.27	3,393.82	3,385.63	12.02	11.81	-160.035	-141.18	-68.01	142.76	119.04	23.71	6.021		
3,500.00	3,498.57	3,492.95	3,484.21	12.36	12.17	-165.226	-151.52	-67.25	145.10	120.71	24.39	5.949		
3,600.00	3,597.54	3,591.81	3,582.54	12.70	12.52	-171.081	-161.83	-66.50	147.24	122.16	25.07	5.872		
3,700.00	3,696.09	3,690.35	3,680.53	13.04	12.88	-177.619	-172.11	-65.76	149.75	123.99	25.76	5.814		
3,800.00	3,794.16	3,788.49	3,778.14	13.39	13.23	-175.212	-182.34	-65.01	153.31	126.86	26.45	5.797		
3,900.00	3,891.70	3,886.17	3,875.28	13.74	13.58	-167.549	-192.53	-64.27	158.65	131.50	27.14	5.845		
4,000.00	3,988.62	3,983.32	3,971.90	14.09	13.93	-159.618	-202.66	-63.53	166.46	138.62	27.84	5.979		
4,100.00	4,085.12	4,080.10	4,068.15	14.44	14.28	-152.005	-212.75	-62.79	177.26	148.71	28.55	6.209		
4,200.00	4,181.62	4,176.88	4,164.40	14.80	14.63	-145.366	-222.84	-62.06	190.78	161.53	29.25	6.522		
4,300.00	4,278.12	4,273.66	4,260.65	15.16	14.98	-139.677	-232.94	-61.32	206.50	176.54	29.96	6.892		
4,400.00	4,374.62	4,370.44	4,356.90	15.52	15.33	-134.837	-243.03	-60.59	223.95	193.28	30.67	7.303		
4,500.00	4,471.12	4,467.23	4,453.15	15.89	15.68	-130.725	-253.12	-59.85	242.76	211.39	31.37	7.738		
4,600.00	4,567.62	4,564.01	4,549.40	16.26	16.04	-127.222	-263.22	-59.12	262.64	230.56	32.07	8.188		
4,700.00	4,664.11	4,660.79	4,645.65	16.63	16.39	-124.223	-273.31	-58.38	283.35	250.58	32.78	8.645		
4,800.00	4,760.61	4,757.57	4,741.90	17.00	16.74	-121.640	-283.40	-57.65	304.74	271.26	33.48	9.102		
4,900.00	4,857.11	4,854.35	4,838.15	17.37	17.09	-119.401	-293.49	-56.91	326.67	292.49	34.18	9.557		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 115H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR										Rule Assigned:				Offset Site Error:
Reference Offset										Distance				Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,953.61	4,951.13	4,934.40	17.75	17.44	117.447	-303.59	-56.18	349.04	314.15	34.89	10.005		
5,100.00	5,050.11	5,047.91	5,030.65	18.12	17.80	115.731	-313.68	-55.44	371.77	336.18	35.59	10.446		
5,200.00	5,146.61	5,144.69	5,126.90	18.50	18.15	114.214	-323.77	-54.71	394.79	358.49	36.29	10.878		
5,300.00	5,243.11	5,241.47	5,223.16	18.88	18.50	112.865	-333.86	-53.97	418.06	381.06	37.00	11.300		
5,400.00	5,339.61	5,338.25	5,319.41	19.26	18.86	111.659	-343.96	-53.24	441.53	403.83	37.70	11.712		
5,500.00	5,436.11	5,435.03	5,415.66	19.65	19.21	110.576	-354.05	-52.50	465.19	426.78	38.41	12.113		
5,600.00	5,532.60	5,531.81	5,511.91	20.03	19.56	109.598	-364.14	-51.77	488.99	449.88	39.11	12.503		
5,700.00	5,629.10	5,628.59	5,608.16	20.41	19.92	108.711	-374.23	-51.03	512.93	473.11	39.82	12.882		
5,800.00	5,725.60	5,725.37	5,704.41	20.80	20.27	107.903	-384.33	-50.30	536.98	496.46	40.52	13.251		
5,900.00	5,822.10	5,822.16	5,800.66	21.19	20.62	107.165	-394.42	-49.56	561.13	519.90	41.23	13.609		
6,000.00	5,918.60	5,918.94	5,896.91	21.58	20.98	106.488	-404.51	-48.83	585.36	543.42	41.94	13.957		
6,100.00	6,015.10	6,015.72	5,993.16	21.96	21.33	105.865	-414.61	-48.09	609.67	567.02	42.65	14.295		
6,200.00	6,111.60	6,112.50	6,089.41	22.35	21.69	105.290	-424.70	-47.36	634.05	590.69	43.36	14.624		
6,300.00	6,208.10	6,209.28	6,185.66	22.74	22.04	104.757	-434.79	-46.62	658.48	614.42	44.07	14.943		
6,400.00	6,304.59	6,306.06	6,281.91	23.14	22.39	104.263	-444.88	-45.89	682.97	638.19	44.78	15.253		
6,500.00	6,401.09	6,402.84	6,378.16	23.53	22.75	103.803	-454.98	-45.15	707.51	662.02	45.49	15.554		
6,600.00	6,497.59	6,502.59	6,477.41	23.92	23.11	103.359	-464.87	-44.43	731.94	685.72	46.22	15.836		
6,700.00	6,594.09	6,603.29	6,577.77	24.32	23.48	102.826	-473.15	-43.83	755.93	708.97	46.95	16.099		
6,800.00	6,690.59	6,703.97	6,678.24	24.71	23.84	102.202	-479.67	-43.35	779.50	731.82	47.68	16.348		
6,900.00	6,787.09	6,804.56	6,778.72	25.10	24.21	101.494	-484.42	-43.01	802.71	754.30	48.41	16.582		
7,000.00	6,883.59	6,905.01	6,879.12	25.50	24.56	100.707	-487.41	-42.79	825.60	776.47	49.13	16.806		
7,100.00	6,980.09	7,005.25	6,979.35	25.90	24.92	99.847	-488.65	-42.70	848.23	798.39	49.84	17.020		
7,200.00	7,076.59	7,102.49	7,076.59	26.29	25.24	98.955	-488.69	-42.70	870.77	820.27	50.51	17.241		
7,300.00	7,173.08	7,198.99	7,173.08	26.69	25.56	98.106	-488.69	-42.70	893.51	842.34	51.17	17.461		
7,400.00	7,269.58	7,295.49	7,269.58	27.09	25.87	97.299	-488.69	-42.70	916.44	864.61	51.84	17.680		
7,500.00	7,366.08	7,391.99	7,366.08	27.49	26.19	96.532	-488.69	-42.70	939.54	887.04	52.50	17.896		
7,600.00	7,462.58	7,488.49	7,462.58	27.88	26.51	95.801	-488.69	-42.70	962.80	909.63	53.17	18.109		
7,700.00	7,559.08	7,584.98	7,559.08	28.28	26.83	95.106	-488.69	-42.70	986.21	932.37	53.84	18.319		
7,800.00	7,655.58	7,681.48	7,655.58	28.68	27.15	94.442	-488.69	-42.70	1,009.76	955.25	54.50	18.527		
7,900.00	7,752.08	7,777.98	7,752.08	29.08	27.47	93.809	-488.69	-42.70	1,033.43	978.26	55.17	18.731		
8,000.00	7,848.58	7,874.48	7,848.58	29.48	27.79	93.205	-488.69	-42.70	1,057.23	1,001.39	55.84	18.932		
8,100.00	7,945.08	7,970.98	7,945.08	29.88	28.12	92.627	-488.69	-42.70	1,081.14	1,024.63	56.51	19.131		
8,200.00	8,041.64	8,067.55	8,041.64	30.28	28.44	92.079	-488.69	-42.70	1,104.92	1,047.74	57.18	19.322		
8,300.00	8,138.76	8,164.67	8,138.76	30.68	28.76	91.597	-488.69	-42.70	1,126.81	1,068.95	57.86	19.475		
8,400.00	8,236.47	8,262.37	8,236.47	31.07	29.09	91.183	-488.69	-42.70	1,146.43	1,087.89	58.54	19.584		
8,500.00	8,334.70	8,361.15	8,335.24	31.45	29.42	90.822	-488.53	-42.70	1,163.72	1,104.50	59.22	19.650		
8,600.00	8,433.39	8,461.28	8,434.64	31.83	29.75	89.988	-477.47	-42.76	1,178.56	1,118.67	59.89	19.678		
8,700.00	8,532.47	8,553.73	8,523.42	32.19	30.04	88.529	-452.05	-42.90	1,191.46	1,130.98	60.47	19.703		
8,800.00	8,631.86	8,635.57	8,597.71	32.56	30.28	86.725	-417.89	-43.08	1,203.48	1,142.54	60.94	19.750		
8,900.00	8,731.51	8,706.08	8,657.27	32.91	30.47	84.826	-380.23	-43.29	1,215.80	1,154.54	61.26	19.846		
9,000.00	8,831.35	8,765.98	8,703.91	33.26	30.62	82.999	-342.69	-43.50	1,229.45	1,168.04	61.41	20.020		
9,100.00	8,931.30	8,816.65	8,740.13	33.61	30.73	81.325	-307.28	-43.69	1,245.25	1,183.88	61.37	20.291		
9,200.00	9,031.29	8,859.59	8,768.27	33.94	30.83	79.832	-274.86	-43.87	1,263.90	1,202.78	61.12	20.680		
9,300.00	9,131.29	8,900.00	8,792.47	34.27	30.91	78.361	-242.51	-44.04	1,287.55	1,226.86	60.70	21.213		
9,400.00	9,231.06	8,928.91	8,808.35	34.59	30.97	77.511	-218.35	-44.18	1,316.42	1,256.37	60.05	21.922		
9,500.00	9,328.48	8,963.98	8,825.95	34.90	31.03	77.159	-188.03	-44.34	1,348.50	1,289.13	59.37	22.714		
9,600.00	9,420.59	9,000.00	8,842.06	35.18	31.10	77.478	-155.82	-44.52	1,381.98	1,323.31	58.67	23.557		
9,700.00	9,504.61	9,050.00	8,861.01	35.42	31.18	77.870	-109.57	-44.77	1,415.32	1,357.23	58.08	24.367		
9,800.00	9,577.97	9,077.42	8,869.66	35.60	31.22	79.783	-83.55	-44.91	1,446.79	1,389.37	57.42	25.197		
9,900.00	9,638.46	9,116.89	8,879.91	35.72	31.28	81.679	-45.44	-45.12	1,475.49	1,418.53	56.96	25.903		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 115H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR										Rule Assigned:				Offset Site Error:
Reference Offset										Distance				Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,000.00	9,684.22	9,150.00	8,886.47	35.79	31.32	84.234	-13.00	-45.30	1,500.37	1,443.72	56.65	26.485		
10,100.00	9,713.87	9,200.00	8,892.80	35.81	31.38	86.291	36.59	-45.57	1,520.54	1,463.96	56.58	26.874		
10,200.00	9,726.51	9,249.73	8,894.78	35.81	31.43	88.476	86.26	-45.84	1,535.65	1,478.96	56.69	27.089		
10,300.00	9,726.69	9,318.80	8,894.54	35.80	31.50	89.814	155.33	-46.22	1,545.93	1,488.98	56.94	27.148		
10,400.00	9,726.34	9,418.40	8,894.20	35.79	31.63	89.813	254.93	-46.77	1,553.39	1,496.19	57.20	27.155		
10,500.00	9,725.98	9,518.25	8,893.85	35.78	31.78	89.813	354.78	-47.31	1,557.93	1,500.46	57.47	27.108		
10,600.00	9,725.63	9,618.23	8,893.50	35.77	31.95	89.813	454.75	-47.86	1,559.52	1,501.78	57.75	27.007		
10,700.00	9,725.27	9,718.23	8,893.15	35.76	32.15	89.813	554.75	-48.41	1,559.51	1,501.47	58.04	26.870		
10,800.00	9,724.91	9,818.23	8,892.80	35.75	32.37	89.813	654.75	-48.96	1,559.50	1,501.12	58.37	26.715		
10,900.00	9,724.56	9,918.23	8,892.45	35.75	32.61	89.813	754.75	-49.50	1,559.49	1,500.74	58.75	26.545		
11,000.00	9,724.20	10,018.23	8,892.10	35.75	32.87	89.813	854.74	-50.05	1,559.47	1,500.31	59.16	26.361		
11,100.00	9,723.84	10,118.23	8,891.75	35.95	33.15	89.813	954.74	-50.60	1,559.46	1,499.85	59.61	26.162		
11,200.00	9,723.48	10,218.23	8,891.40	36.22	33.45	89.813	1,054.74	-51.15	1,559.45	1,499.35	60.09	25.950		
11,300.00	9,723.13	10,318.23	8,891.06	36.50	33.77	89.813	1,154.74	-51.69	1,559.43	1,498.82	60.61	25.727		
11,400.00	9,722.77	10,418.23	8,890.71	36.80	34.11	89.813	1,254.73	-52.24	1,559.42	1,498.25	61.17	25.494		
11,500.00	9,722.41	10,518.23	8,890.36	37.12	34.47	89.813	1,354.73	-52.79	1,559.41	1,497.65	61.76	25.250		
11,600.00	9,722.06	10,618.23	8,890.01	37.45	34.84	89.813	1,454.73	-53.33	1,559.39	1,497.01	62.38	24.998		
11,700.00	9,721.70	10,718.23	8,889.66	37.80	35.24	89.813	1,554.73	-53.88	1,559.38	1,496.35	63.03	24.739		
11,800.00	9,721.34	10,818.23	8,889.31	38.17	35.65	89.813	1,654.73	-54.43	1,559.37	1,495.65	63.72	24.473		
11,900.00	9,720.98	10,918.23	8,888.96	38.55	36.07	89.813	1,754.72	-54.98	1,559.36	1,494.92	64.43	24.202		
12,000.00	9,720.63	11,018.23	8,888.61	38.95	36.52	89.813	1,854.72	-55.52	1,559.34	1,494.17	65.18	23.925		
12,100.00	9,720.27	11,118.23	8,888.26	39.37	36.97	89.813	1,954.72	-56.07	1,559.33	1,493.38	65.95	23.646		
12,200.00	9,719.91	11,218.23	8,887.91	39.79	37.45	89.813	2,054.72	-56.62	1,559.32	1,492.57	66.74	23.363		
12,300.00	9,719.55	11,318.23	8,887.56	40.24	37.93	89.813	2,154.72	-57.17	1,559.30	1,491.74	67.57	23.078		
12,400.00	9,719.20	11,418.23	8,887.22	40.69	38.43	89.813	2,254.71	-57.71	1,559.29	1,490.87	68.42	22.791		
12,500.00	9,718.84	11,518.23	8,886.87	41.16	38.94	89.813	2,354.71	-58.26	1,559.28	1,489.99	69.29	22.504		
12,600.00	9,718.48	11,618.23	8,886.52	41.64	39.47	89.813	2,454.71	-58.81	1,559.26	1,489.08	70.19	22.216		
12,700.00	9,718.13	11,718.23	8,886.17	42.13	40.00	89.813	2,554.71	-59.35	1,559.25	1,488.15	71.10	21.929		
12,800.00	9,717.77	11,818.23	8,885.82	42.64	40.55	89.813	2,654.71	-59.90	1,559.24	1,487.19	72.04	21.643		
12,900.00	9,717.41	11,918.23	8,885.47	43.15	41.11	89.813	2,754.70	-60.45	1,559.22	1,486.22	73.01	21.358		
13,000.00	9,717.05	12,018.23	8,885.12	43.68	41.68	89.813	2,854.70	-61.00	1,559.21	1,485.23	73.99	21.074		
13,100.00	9,716.70	12,118.23	8,884.77	44.22	42.26	89.813	2,954.70	-61.54	1,559.20	1,484.21	74.99	20.793		
13,200.00	9,716.34	12,218.23	8,884.42	44.77	42.85	89.813	3,054.70	-62.09	1,559.19	1,483.18	76.00	20.515		
13,300.00	9,715.98	12,318.23	8,884.07	45.32	43.45	89.813	3,154.69	-62.64	1,559.17	1,482.13	77.04	20.239		
13,400.00	9,715.62	12,418.23	8,883.73	45.89	44.06	89.813	3,254.69	-63.19	1,559.16	1,481.07	78.09	19.966		
13,500.00	9,715.27	12,518.23	8,883.38	46.47	44.67	89.813	3,354.69	-63.73	1,559.15	1,479.99	79.16	19.696		
13,600.00	9,714.91	12,618.23	8,883.03	47.05	45.30	89.813	3,454.69	-64.28	1,559.13	1,478.89	80.24	19.430		
13,700.00	9,714.55	12,718.23	8,882.68	47.65	45.93	89.813	3,554.69	-64.83	1,559.12	1,477.78	81.34	19.167		
13,800.00	9,714.20	12,818.23	8,882.33	48.25	46.57	89.813	3,654.68	-65.38	1,559.11	1,476.65	82.46	18.908		
13,900.00	9,713.84	12,918.23	8,881.98	48.86	47.22	89.813	3,754.68	-65.92	1,559.09	1,475.51	83.59	18.653		
14,000.00	9,713.48	13,018.23	8,881.63	49.48	47.87	89.813	3,854.68	-66.47	1,559.08	1,474.35	84.73	18.401		
14,100.00	9,713.12	13,118.23	8,881.28	50.10	48.53	89.813	3,954.68	-67.02	1,559.07	1,473.19	85.88	18.154		
14,200.00	9,712.77	13,218.23	8,880.93	50.73	49.20	89.813	4,054.68	-67.56	1,559.05	1,472.01	87.05	17.911		
14,300.00	9,712.41	13,318.23	8,880.58	51.37	49.87	89.813	4,154.67	-68.11	1,559.04	1,470.82	88.22	17.672		
14,400.00	9,712.05	13,418.23	8,880.23	52.02	50.55	89.813	4,254.67	-68.66	1,559.03	1,469.62	89.41	17.437		
14,500.00	9,711.70	13,518.23	8,879.89	52.67	51.24	89.813	4,354.67	-69.21	1,559.02	1,468.40	90.61	17.206		
14,600.00	9,711.34	13,618.23	8,879.54	53.33	51.93	89.813	4,454.67	-69.75	1,559.00	1,467.18	91.82	16.979		
14,700.00	9,710.98	13,718.23	8,879.19	53.99	52.62	89.813	4,554.67	-70.30	1,558.99	1,465.95	93.04	16.756		
14,800.00	9,710.62	13,818.23	8,878.84	54.66	53.33	89.813	4,654.66	-70.85	1,558.98	1,464.71	94.27	16.537		
14,900.00	9,710.27	13,918.23	8,878.49	55.34	54.03	89.813	4,754.66	-71.40	1,558.96	1,463.45	95.51	16.323		
15,000.00	9,709.91	14,018.23	8,878.14	56.02	54.74	89.813	4,854.66	-71.94	1,558.95	1,462.19	96.76	16.112		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 115H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Site Error: 0.00 usft
Rule Assigned: Distance Between Centres (usft) Ellipses (usft) Minimum Separation (usft) Separation Factor													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.00	9,709.55	14,118.23	8,877.79	56.70	55.46	89.813	4,954.66	-72.49	1,558.94	1,460.92	98.01	15.905	
15,200.00	9,709.19	14,218.23	8,877.44	57.39	56.18	89.813	5,054.65	-73.04	1,558.92	1,459.65	99.28	15.703	
15,300.00	9,708.84	14,318.23	8,877.09	58.09	56.90	89.813	5,154.65	-73.59	1,558.91	1,458.36	100.55	15.504	
15,400.00	9,708.48	14,418.23	8,876.74	58.79	57.63	89.813	5,254.65	-74.13	1,558.90	1,457.07	101.83	15.309	
15,500.00	9,708.12	14,518.23	8,876.40	59.49	58.36	89.813	5,354.65	-74.68	1,558.89	1,455.77	103.12	15.118	
15,600.00	9,707.77	14,618.23	8,876.05	60.20	59.09	89.813	5,454.65	-75.23	1,558.87	1,454.46	104.41	14.930	
15,700.00	9,707.41	14,718.23	8,875.70	60.91	59.83	89.813	5,554.64	-75.77	1,558.86	1,453.15	105.71	14.746	
15,800.00	9,707.05	14,818.23	8,875.35	61.63	60.57	89.813	5,654.64	-76.32	1,558.85	1,451.83	107.02	14.566	
15,900.00	9,706.69	14,918.23	8,875.00	62.35	61.32	89.813	5,754.64	-76.87	1,558.83	1,450.50	108.33	14.389	
16,000.00	9,706.34	15,018.23	8,874.65	63.07	62.07	89.813	5,854.64	-77.42	1,558.82	1,449.17	109.65	14.216	
16,100.00	9,705.98	15,118.23	8,874.30	63.80	62.82	89.813	5,954.64	-77.96	1,558.81	1,447.83	110.98	14.046	
16,200.00	9,705.62	15,218.23	8,873.95	64.53	63.57	89.813	6,054.63	-78.51	1,558.79	1,446.48	112.31	13.879	
16,300.00	9,705.27	15,318.23	8,873.60	65.27	64.33	89.813	6,154.63	-79.06	1,558.78	1,445.13	113.65	13.716	
16,400.00	9,704.91	15,418.23	8,873.25	66.00	65.09	89.813	6,254.63	-79.61	1,558.77	1,443.78	114.99	13.556	
16,500.00	9,704.55	15,518.23	8,872.91	66.74	65.85	89.813	6,354.63	-80.15	1,558.75	1,442.42	116.34	13.398	
16,600.00	9,704.19	15,618.23	8,872.56	67.49	66.62	89.813	6,454.63	-80.70	1,558.74	1,441.05	117.69	13.244	
16,700.00	9,703.84	15,718.23	8,872.21	68.23	67.38	89.813	6,554.62	-81.25	1,558.73	1,439.68	119.05	13.093	
16,800.00	9,703.48	15,818.23	8,871.86	68.98	68.15	89.813	6,654.62	-81.80	1,558.72	1,438.31	120.41	12.945	
16,900.00	9,703.12	15,918.23	8,871.51	69.73	68.93	89.813	6,754.62	-82.34	1,558.70	1,436.93	121.78	12.800	
17,000.00	9,702.76	16,018.23	8,871.16	70.49	69.70	89.813	6,854.62	-82.89	1,558.69	1,435.54	123.15	12.657	
17,100.00	9,702.41	16,118.23	8,870.81	71.25	70.48	89.813	6,954.61	-83.44	1,558.68	1,434.16	124.52	12.517	
17,200.00	9,702.05	16,218.23	8,870.46	72.01	71.26	89.813	7,054.61	-83.98	1,558.66	1,432.76	125.90	12.380	
17,300.00	9,701.69	16,318.23	8,870.11	72.77	72.04	89.813	7,154.61	-84.53	1,558.65	1,431.37	127.28	12.246	
17,400.00	9,701.34	16,418.23	8,869.76	73.53	72.82	89.813	7,254.61	-85.08	1,558.64	1,429.97	128.67	12.114	
17,500.00	9,700.98	16,518.23	8,869.41	74.30	73.61	89.813	7,354.61	-85.63	1,558.62	1,428.57	130.06	11.984	
17,600.00	9,700.62	16,618.23	8,869.07	75.07	74.39	89.813	7,454.60	-86.17	1,558.61	1,427.16	131.45	11.857	
17,700.00	9,700.26	16,718.23	8,868.72	75.84	75.18	89.813	7,554.60	-86.72	1,558.60	1,425.75	132.85	11.732	
17,800.00	9,699.91	16,818.23	8,868.37	76.61	75.97	89.813	7,654.60	-87.27	1,558.58	1,424.34	134.25	11.610	
17,900.00	9,699.55	16,918.23	8,868.02	77.39	76.76	89.813	7,754.60	-87.82	1,558.57	1,422.92	135.65	11.490	
18,000.00	9,699.19	17,018.23	8,867.67	78.16	77.56	89.813	7,854.60	-88.36	1,558.56	1,421.50	137.06	11.372	
18,100.00	9,698.83	17,118.23	8,867.32	78.94	78.35	89.813	7,954.59	-88.91	1,558.55	1,420.08	138.47	11.256	
18,200.00	9,698.48	17,218.23	8,866.97	79.72	79.15	89.813	8,054.59	-89.46	1,558.53	1,418.65	139.88	11.142	
18,300.00	9,698.12	17,318.23	8,866.62	80.51	79.95	89.813	8,154.59	-90.01	1,558.52	1,417.23	141.29	11.030	
18,400.00	9,697.76	17,418.23	8,866.27	81.29	80.75	89.813	8,254.59	-90.55	1,558.51	1,415.80	142.71	10.921	
18,500.00	9,697.41	17,518.23	8,865.92	82.08	81.55	89.813	8,354.59	-91.10	1,558.49	1,414.36	144.13	10.813	
18,600.00	9,697.05	17,618.23	8,865.58	82.86	82.35	89.813	8,454.58	-91.65	1,558.48	1,412.93	145.56	10.707	
18,700.00	9,696.69	17,718.23	8,865.23	83.65	83.15	89.813	8,554.58	-92.19	1,558.47	1,411.49	146.98	10.603	
18,800.00	9,696.33	17,818.23	8,864.88	84.44	83.96	89.813	8,654.58	-92.74	1,558.45	1,410.05	148.41	10.501	
18,900.00	9,695.98	17,918.23	8,864.53	85.24	84.76	89.813	8,754.58	-93.29	1,558.44	1,408.60	149.84	10.401	
19,000.00	9,695.62	18,018.23	8,864.18	86.03	85.57	89.813	8,854.57	-93.84	1,558.43	1,407.16	151.27	10.302	
19,100.00	9,695.26	18,118.23	8,863.83	86.82	86.38	89.813	8,954.57	-94.38	1,558.42	1,405.71	152.71	10.205	
19,200.00	9,694.91	18,218.23	8,863.48	87.62	87.19	89.813	9,054.57	-94.93	1,558.40	1,404.26	154.14	10.110	
19,300.00	9,694.55	18,318.23	8,863.13	88.42	88.00	89.813	9,154.57	-95.48	1,558.39	1,402.81	155.58	10.016	
19,400.00	9,694.19	18,418.23	8,862.78	89.22	88.81	89.813	9,254.57	-96.03	1,558.38	1,401.35	157.02	9.924	
19,500.00	9,693.83	18,518.23	8,862.43	90.02	89.62	89.813	9,354.56	-96.57	1,558.36	1,399.90	158.47	9.834	
19,600.00	9,693.48	18,618.23	8,862.08	90.82	90.44	89.813	9,454.56	-97.12	1,558.35	1,398.44	159.91	9.745	
19,700.00	9,693.12	18,718.23	8,861.74	91.62	91.25	89.813	9,554.56	-97.67	1,558.34	1,396.98	161.36	9.658	
19,800.00	9,692.76	18,818.23	8,861.39	92.43	92.07	89.813	9,654.56	-98.22	1,558.32	1,395.51	162.81	9.571	
19,900.00	9,692.40	18,918.23	8,861.04	93.23	92.88	89.813	9,754.56	-98.76	1,558.31	1,394.05	164.26	9.487	
20,000.00	9,692.05	19,018.23	8,860.69	94.04	93.70	89.813	9,854.55	-99.31	1,558.30	1,392.59	165.71	9.404	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 115H - Wellbore #1 - Design #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:			Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
20,100.00	9,691.69	19,118.23	8,860.34	94.84	94.52	89.813	9,954.55	-99.86	1,558.28	1,391.12	167.17	9.322	
20,150.35	9,691.51	19,168.58	8,860.16	95.25	94.93	89.813	10,004.90	-100.13	1,558.28	1,390.38	167.90	9.281	



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 121H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Rule Assigned: Distance Between		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-89.976	0.04	-105.11	105.11				
100.00	100.00	100.00	100.00	0.26	0.26	-89.976	0.04	-105.11	105.11	104.59	0.53	199.476	
200.00	200.00	200.00	200.00	0.62	0.62	-89.976	0.04	-105.11	105.11	103.87	1.24	84.504	
300.00	300.00	300.00	300.00	0.98	0.98	-89.976	0.04	-105.11	105.11	103.15	1.96	53.607	
400.00	400.00	400.00	400.00	1.34	1.34	-89.976	0.04	-105.11	105.11	102.44	2.68	39.254	
500.00	500.00	500.00	500.00	1.70	1.70	-89.976	0.04	-105.11	105.11	101.72	3.39	30.964	
600.00	600.00	600.00	600.00	2.06	2.06	-89.976	0.04	-105.11	105.11	101.00	4.11	25.565	
700.00	700.00	700.00	700.00	2.41	2.41	-89.976	0.04	-105.11	105.11	100.29	4.83	21.769	
800.00	800.00	800.00	800.00	2.77	2.77	-89.976	0.04	-105.11	105.11	99.57	5.55	18.955	
900.00	900.00	900.91	900.90	3.13	3.12	-90.398	-0.73	-104.67	104.68	98.43	6.25	16.752	
1,000.00	1,000.00	1,001.76	1,001.71	3.49	3.45	-91.684	-3.04	-103.35	103.41	96.47	6.94	14.901	
1,100.00	1,100.00	1,102.48	1,102.34	3.85	3.79	-93.894	-6.88	-101.15	101.41	93.78	7.64	13.281	
1,200.00	1,200.00	1,203.01	1,202.68	4.21	4.13	-97.122	-12.25	-98.08	98.88	90.54	8.34	11.863	
1,300.00	1,300.00	1,303.30	1,302.65	4.57	4.48	-101.487	-19.13	-94.15	96.11	87.07	9.04	10.634	
1,400.00	1,400.00	1,403.16	1,402.06	4.92	4.82	-107.041	-27.41	-89.42	93.54	83.80	9.74	9.600	
1,500.00	1,500.00	1,502.67	1,501.07	5.28	5.17	-113.067	-35.99	-84.51	91.86	81.41	10.45	8.788	
1,600.00	1,600.00	1,602.17	1,600.08	5.64	5.52	-119.245	-44.57	-79.60	91.23	80.07	11.16	8.173	
1,608.40	1,608.40	1,610.53	1,608.40	5.67	5.55	-119.767	-45.29	-79.19	91.23	80.00	11.22	8.129 CC	
1,700.00	1,700.00	1,701.68	1,699.10	6.00	5.87	-125.435	-53.15	-74.69	91.68	79.81	11.87	7.721 ES	
1,800.00	1,800.00	1,801.18	1,798.11	6.36	6.23	-131.495	-61.73	-69.79	93.19	80.61	12.58	7.405	
1,900.00	1,900.00	1,900.69	1,897.12	6.72	6.58	-137.302	-70.31	-64.88	95.72	82.42	13.29	7.200	
2,000.00	2,000.00	2,000.19	1,996.13	7.07	6.94	-142.759	-78.89	-59.97	99.18	85.17	14.00	7.082	
2,100.00	2,100.00	2,099.70	2,095.15	7.43	7.30	-147.810	-87.48	-55.07	103.48	88.77	14.71	7.033 SF	
2,200.00	2,200.00	2,199.20	2,194.16	7.79	7.66	-152.428	-96.06	-50.16	108.52	93.10	15.42	7.037	
2,300.00	2,300.00	2,298.71	2,293.17	8.15	8.02	-156.614	-104.64	-45.25	114.21	98.08	16.13	7.081	
2,400.00	2,400.00	2,398.21	2,392.19	8.51	8.38	-160.387	-113.22	-40.34	120.45	103.61	16.84	7.154	
2,500.00	2,500.00	2,497.72	2,491.20	8.87	8.74	-163.778	-121.80	-35.44	127.15	109.61	17.54	7.248	
2,600.00	2,600.00	2,597.22	2,590.21	9.23	9.10	-166.821	-130.38	-30.53	134.26	116.01	18.25	7.357	
2,700.00	2,700.00	2,696.73	2,689.23	9.58	9.46	-169.553	-138.96	-25.62	141.71	122.76	18.96	7.475	
2,800.00	2,800.00	2,796.23	2,788.24	9.94	9.82	-172.008	-147.54	-20.71	149.45	129.79	19.67	7.599	
2,900.00	2,900.00	2,895.74	2,887.25	10.30	10.18	-174.219	-156.12	-15.81	157.44	137.06	20.38	7.727	
3,000.00	3,000.00	2,995.25	2,986.27	10.66	10.54	-176.214	-164.71	-10.90	165.64	144.55	21.08	7.856	
3,100.00	3,099.99	3,094.72	3,085.25	11.01	10.91	-178.417	-173.28	-5.99	173.50	151.72	21.78	7.966	
3,200.00	3,199.91	3,194.09	3,184.13	11.34	11.27	-178.796	-181.85	-1.09	180.68	158.21	22.46	8.043	
3,300.00	3,299.69	3,293.28	3,282.83	11.68	11.63	-175.465	-190.41	3.80	187.46	164.32	23.15	8.099	
3,400.00	3,399.27	3,392.24	3,381.29	12.02	11.99	-171.625	-198.94	8.68	194.21	170.38	23.83	8.150	
3,500.00	3,498.57	3,490.88	3,479.45	12.36	12.35	-167.326	-207.45	13.54	201.34	176.82	24.51	8.213	
3,600.00	3,597.54	3,589.14	3,577.23	12.70	12.71	-162.630	-215.92	18.39	209.28	184.08	25.20	8.305	
3,700.00	3,696.09	3,686.96	3,674.56	13.04	13.07	-157.622	-224.36	23.21	218.50	192.61	25.88	8.441	
3,800.00	3,794.16	3,784.27	3,771.39	13.39	13.42	-152.408	-232.75	28.01	229.44	202.87	26.57	8.635	
3,900.00	3,891.70	3,881.00	3,867.64	13.74	13.78	-147.106	-241.09	32.78	242.54	215.27	27.26	8.896	
4,000.00	3,988.62	3,977.08	3,963.25	14.09	14.13	-141.835	-249.38	37.52	258.13	230.17	27.95	9.234	
4,100.00	4,085.12	4,072.73	4,058.42	14.44	14.48	-136.889	-257.63	42.24	276.17	247.52	28.65	9.641	
4,200.00	4,181.62	4,168.37	4,153.59	14.80	14.83	-132.575	-265.87	46.95	296.00	266.67	29.34	10.089	
4,300.00	4,278.12	4,264.01	4,248.76	15.16	15.18	-128.822	-274.12	51.67	317.29	287.26	30.03	10.565	
4,400.00	4,374.62	4,359.65	4,343.92	15.52	15.53	-125.554	-282.37	56.39	339.76	309.03	30.73	11.057	
4,500.00	4,471.12	4,455.29	4,439.09	15.89	15.88	-122.700	-290.62	61.10	363.18	331.76	31.42	11.558	
4,600.00	4,567.62	4,550.93	4,534.26	16.26	16.23	-120.199	-298.86	65.82	387.39	355.27	32.12	12.062	
4,700.00	4,664.11	4,646.57	4,629.43	16.63	16.58	-117.996	-307.11	70.54	412.25	379.44	32.81	12.564	
4,800.00	4,760.61	4,742.21	4,724.59	17.00	16.93	-116.047	-315.36	75.25	437.64	404.14	33.51	13.061	
4,900.00	4,857.11	4,837.86	4,819.76	17.37	17.28	-114.314	-323.61	79.97	463.49	429.28	34.20	13.551	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 121H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR										Rule Assigned:				Offset Site Error:
Reference Offset										Distance				Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,953.61	4,933.50	4,914.93	17.75	17.63	112.766	-331.86	84.69	489.71	454.81	34.90	14.032		
5,100.00	5,050.11	5,029.14	5,010.10	18.12	17.98	111.376	-340.10	89.40	516.25	480.66	35.60	14.503		
5,200.00	5,146.61	5,124.78	5,105.26	18.50	18.33	110.123	-348.35	94.12	543.07	506.77	36.29	14.964		
5,300.00	5,243.11	5,220.42	5,200.43	18.88	18.68	108.989	-356.60	98.84	570.12	533.13	36.99	15.413		
5,400.00	5,339.61	5,316.06	5,295.60	19.26	19.03	107.958	-364.85	103.55	597.37	559.68	37.69	15.851		
5,500.00	5,436.11	5,411.70	5,390.77	19.65	19.39	107.018	-373.10	108.27	624.80	586.41	38.38	16.277		
5,600.00	5,532.60	5,507.34	5,485.94	20.03	19.74	106.157	-381.34	112.99	652.38	613.30	39.08	16.692		
5,700.00	5,629.10	5,602.98	5,581.10	20.41	20.09	105.366	-389.59	117.70	680.10	640.32	39.78	17.095		
5,800.00	5,725.60	5,698.62	5,676.27	20.80	20.44	104.637	-397.84	122.42	707.94	667.46	40.48	17.488		
5,900.00	5,822.10	5,794.26	5,771.44	21.19	20.79	103.963	-406.09	127.14	735.88	694.70	41.18	17.869		
6,000.00	5,918.60	5,889.90	5,866.61	21.58	21.14	103.339	-414.33	131.85	763.92	722.04	41.88	18.240		
6,100.00	6,015.10	5,985.55	5,961.77	21.96	21.49	102.760	-422.58	136.57	792.04	749.46	42.58	18.600		
6,200.00	6,111.60	6,081.19	6,056.94	22.35	21.84	102.220	-430.83	141.29	820.24	776.95	43.28	18.950		
6,300.00	6,208.10	6,176.83	6,152.11	22.74	22.19	101.716	-439.08	146.00	848.50	804.52	43.99	19.291		
6,400.00	6,304.59	6,272.47	6,247.28	23.14	22.54	101.245	-447.33	150.72	876.83	832.14	44.69	19.621		
6,500.00	6,401.09	6,368.11	6,342.44	23.53	22.90	100.803	-455.57	155.44	905.21	859.82	45.39	19.943		
6,600.00	6,497.59	6,464.55	6,438.41	23.92	23.25	100.392	-463.89	160.19	933.65	887.55	46.10	20.253		
6,700.00	6,594.09	6,571.75	6,545.18	24.32	23.64	100.002	-472.14	164.91	961.47	914.59	46.88	20.509		
6,800.00	6,690.59	6,679.42	6,652.59	24.71	24.03	99.546	-478.68	168.65	988.21	940.55	47.66	20.736		
6,900.00	6,787.09	6,787.50	6,760.53	25.10	24.42	99.026	-483.49	171.40	1,013.88	965.45	48.43	20.936		
7,000.00	6,883.59	6,895.92	6,868.89	25.50	24.81	98.445	-486.53	173.14	1,038.51	989.31	49.19	21.111		
7,100.00	6,980.09	7,004.59	6,977.55	25.90	25.20	97.803	-487.80	173.86	1,062.13	1,012.18	49.95	21.264		
7,200.00	7,076.59	7,103.63	7,076.59	26.29	25.52	97.130	-487.84	173.89	1,085.13	1,034.50	50.63	21.432		
7,300.00	7,173.08	7,200.13	7,173.08	26.69	25.83	96.483	-487.84	173.89	1,108.26	1,056.96	51.30	21.605		
7,400.00	7,269.58	7,296.63	7,269.58	27.09	26.15	95.863	-487.84	173.89	1,131.52	1,079.55	51.96	21.775		
7,500.00	7,366.08	7,393.13	7,366.08	27.49	26.46	95.267	-487.84	173.89	1,154.90	1,102.27	52.63	21.943		
7,600.00	7,462.58	7,489.62	7,462.58	27.88	26.78	94.696	-487.84	173.89	1,178.41	1,125.11	53.30	22.108		
7,700.00	7,559.08	7,586.12	7,559.08	28.28	27.09	94.147	-487.84	173.89	1,202.03	1,148.05	53.97	22.272		
7,800.00	7,655.58	7,682.62	7,655.58	28.68	27.41	93.619	-487.84	173.89	1,225.75	1,171.11	54.64	22.433		
7,900.00	7,752.08	7,779.12	7,752.08	29.08	27.73	93.111	-487.84	173.89	1,249.57	1,194.26	55.31	22.591		
8,000.00	7,848.58	7,875.62	7,848.58	29.48	28.04	92.622	-487.84	173.89	1,273.49	1,217.51	55.98	22.748		
8,100.00	7,945.08	7,972.12	7,945.08	29.88	28.36	92.151	-487.84	173.89	1,297.50	1,240.85	56.66	22.901		
8,200.00	8,041.64	8,068.69	8,041.64	30.28	28.68	91.702	-487.84	173.89	1,321.36	1,264.03	57.33	23.049		
8,300.00	8,138.76	8,165.81	8,138.76	30.68	29.01	91.304	-487.84	173.89	1,343.31	1,285.30	58.01	23.158		
8,400.00	8,236.47	8,263.51	8,236.47	31.07	29.33	90.959	-487.84	173.89	1,362.96	1,304.27	58.68	23.225		
8,500.00	8,334.70	8,361.75	8,334.70	31.45	29.66	90.664	-487.84	173.89	1,380.28	1,320.91	59.37	23.250		
8,600.00	8,433.39	8,460.43	8,433.39	31.83	29.99	90.416	-487.84	173.89	1,395.24	1,335.19	60.05	23.234		
8,700.00	8,532.47	8,559.51	8,532.47	32.19	30.32	90.211	-487.84	173.89	1,407.82	1,347.09	60.74	23.179		
8,800.00	8,631.86	8,658.91	8,631.86	32.56	30.65	90.049	-487.84	173.89	1,418.00	1,356.58	61.42	23.086		
8,900.00	8,731.51	8,758.56	8,731.51	32.91	30.98	89.927	-487.84	173.89	1,425.76	1,363.65	62.11	22.955		
9,000.00	8,831.35	8,858.39	8,831.35	33.26	31.32	89.843	-487.84	173.89	1,431.10	1,368.30	62.80	22.790		
9,100.00	8,931.30	8,958.34	8,931.30	33.61	31.66	89.799	-487.84	173.89	1,433.99	1,370.51	63.48	22.589		
9,200.00	9,031.29	9,058.34	9,031.29	33.94	31.99	89.790	-487.84	173.89	1,434.57	1,370.41	64.16	22.360		
9,300.00	9,131.29	9,158.34	9,131.29	34.27	32.33	89.790	-487.84	173.89	1,434.57	1,369.74	64.83	22.128		
9,400.00	9,231.06	9,241.96	9,214.87	34.59	32.61	89.923	-486.02	174.14	1,435.62	1,370.20	65.42	21.945		
9,500.00	9,328.48	9,315.84	9,287.93	34.90	32.85	90.372	-475.49	175.62	1,440.64	1,374.71	65.93	21.851		
9,600.00	9,420.59	9,390.03	9,359.30	35.18	33.09	91.096	-455.64	178.41	1,449.69	1,383.28	66.41	21.829		
9,700.00	9,504.61	9,464.68	9,427.90	35.42	33.30	92.048	-426.63	182.49	1,462.57	1,395.71	66.87	21.873		
9,800.00	9,577.97	9,539.99	9,492.67	35.60	33.51	93.158	-388.66	187.82	1,478.98	1,411.69	67.29	21.978		
9,900.00	9,638.46	9,616.27	9,552.56	35.72	33.69	94.346	-341.98	194.38	1,498.53	1,430.83	67.69	22.137		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 121H - Wellbore #1 - Design #1

													Offset Site Error: 0.00 usft
													Offset Well Error: 0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Azimuth		Offset Wellbore Centre		Rule Assigned:		Distance	Minimum	Separation	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
10,000.00	9,684.22	9,693.91	9,606.55	35.79	33.86	95.522	-286.81	202.14	1,520.75	1,452.68	68.07	22.341	
10,100.00	9,713.87	9,773.48	9,653.55	35.81	34.00	96.587	-223.31	211.06	1,545.12	1,476.71	68.41	22.585	
10,200.00	9,726.51	9,855.72	9,692.32	35.81	34.14	97.444	-151.56	221.15	1,571.06	1,502.35	68.71	22.865	
10,300.00	9,726.69	9,943.43	9,721.78	35.80	34.26	97.952	-69.84	232.63	1,597.06	1,528.10	68.96	23.160	
10,400.00	9,726.34	10,039.80	9,739.24	35.79	34.36	98.045	23.90	245.81	1,620.27	1,551.10	69.17	23.424	
10,500.00	9,725.98	10,196.86	9,742.00	35.78	34.50	95.984	179.57	265.89	1,639.29	1,569.89	69.40	23.619	
10,600.00	9,725.63	10,430.60	9,742.00	35.77	34.80	91.310	412.77	280.76	1,648.09	1,578.28	69.80	23.610	
10,700.00	9,725.27	10,577.21	9,742.00	35.76	35.05	89.689	559.37	281.11	1,648.58	1,578.38	70.19	23.486	
10,800.00	9,724.91	10,677.21	9,742.00	35.75	35.24	89.689	659.37	280.57	1,648.58	1,578.01	70.57	23.362	
10,900.00	9,724.56	10,777.21	9,742.00	35.75	35.46	89.689	759.37	280.02	1,648.57	1,577.60	70.98	23.227	
11,000.00	9,724.20	10,877.21	9,742.00	35.75	35.69	89.689	859.37	279.48	1,648.57	1,577.14	71.43	23.080	
11,100.00	9,723.84	10,977.21	9,742.00	35.95	35.94	89.689	959.37	278.94	1,648.57	1,576.65	71.92	22.922	
11,200.00	9,723.48	11,077.21	9,742.00	36.22	36.22	89.689	1,059.36	278.40	1,648.57	1,576.12	72.45	22.755	
11,300.00	9,723.13	11,177.21	9,742.00	36.50	36.51	89.689	1,159.36	277.85	1,648.57	1,575.55	73.02	22.578	
11,400.00	9,722.77	11,277.21	9,742.00	36.80	36.82	89.689	1,259.36	277.31	1,648.57	1,574.95	73.62	22.394	
11,500.00	9,722.41	11,377.21	9,742.00	37.12	37.14	89.689	1,359.36	276.77	1,648.57	1,574.31	74.26	22.201	
11,600.00	9,722.06	11,477.21	9,742.00	37.45	37.49	89.689	1,459.36	276.23	1,648.57	1,573.64	74.93	22.002	
11,700.00	9,721.70	11,577.21	9,742.00	37.80	37.85	89.689	1,559.35	275.69	1,648.57	1,572.93	75.64	21.796	
11,800.00	9,721.34	11,677.20	9,742.00	38.17	38.23	89.689	1,659.35	275.14	1,648.56	1,572.19	76.38	21.585	
11,900.00	9,720.98	11,777.20	9,742.00	38.55	38.62	89.689	1,759.35	274.60	1,648.56	1,571.42	77.15	21.369	
12,000.00	9,720.63	11,877.20	9,742.00	38.95	39.03	89.689	1,859.35	274.06	1,648.56	1,570.61	77.95	21.149	
12,100.00	9,720.27	11,977.20	9,742.00	39.37	39.45	89.689	1,959.34	273.52	1,648.56	1,569.78	78.78	20.925	
12,200.00	9,719.91	12,077.20	9,742.00	39.79	39.89	89.689	2,059.34	272.97	1,648.56	1,568.92	79.65	20.699	
12,300.00	9,719.55	12,177.20	9,742.00	40.24	40.34	89.689	2,159.34	272.43	1,648.56	1,568.03	80.54	20.470	
12,400.00	9,719.20	12,277.20	9,742.00	40.69	40.80	89.689	2,259.34	271.89	1,648.56	1,567.11	81.45	20.239	
12,500.00	9,718.84	12,377.20	9,742.00	41.16	41.28	89.689	2,359.34	271.35	1,648.56	1,566.17	82.40	20.008	
12,600.00	9,718.48	12,477.20	9,742.00	41.64	41.77	89.689	2,459.33	270.81	1,648.56	1,565.20	83.37	19.775	
12,700.00	9,718.13	12,577.20	9,742.00	42.13	42.27	89.689	2,559.33	270.26	1,648.56	1,564.20	84.36	19.542	
12,726.22	9,718.03	12,603.42	9,742.00	42.26	42.41	89.689	2,585.55	270.12	1,648.56	1,563.94	84.62	19.481	
12,800.00	9,717.77	12,677.20	9,742.00	42.64	42.79	89.689	2,659.33	269.72	1,648.56	1,563.19	85.38	19.309	
12,900.00	9,717.41	12,777.20	9,742.00	43.15	43.31	89.689	2,759.33	269.18	1,648.56	1,562.15	86.42	19.077	
13,000.00	9,717.05	12,877.20	9,742.00	43.68	43.85	89.689	2,859.33	268.64	1,648.56	1,561.08	87.48	18.845	
13,100.00	9,716.70	12,977.20	9,742.00	44.22	44.40	89.689	2,959.32	268.09	1,648.56	1,560.00	88.56	18.615	
13,200.00	9,716.34	13,077.20	9,742.00	44.77	44.95	89.689	3,059.32	267.55	1,648.56	1,558.90	89.67	18.386	
13,300.00	9,715.98	13,177.20	9,742.00	45.32	45.52	89.689	3,159.32	267.01	1,648.56	1,557.77	90.79	18.158	
13,400.00	9,715.62	13,277.19	9,742.00	45.89	46.09	89.689	3,259.32	266.47	1,648.56	1,556.63	91.93	17.933	
13,500.00	9,715.27	13,377.19	9,742.00	46.47	46.68	89.689	3,359.32	265.92	1,648.56	1,555.47	93.09	17.709	
13,600.00	9,714.91	13,477.19	9,742.00	47.05	47.27	89.689	3,459.31	265.38	1,648.56	1,554.29	94.27	17.488	
13,700.00	9,714.55	13,577.19	9,742.00	47.65	47.87	89.689	3,559.31	264.84	1,648.56	1,553.10	95.47	17.269	
13,800.00	9,714.20	13,677.19	9,742.00	48.25	48.48	89.689	3,659.31	264.30	1,648.57	1,551.89	96.68	17.052	
13,900.00	9,713.84	13,777.19	9,742.00	48.86	49.10	89.689	3,759.31	263.76	1,648.57	1,550.66	97.91	16.838	
14,000.00	9,713.48	13,877.19	9,742.00	49.48	49.73	89.689	3,859.30	263.21	1,648.57	1,549.42	99.15	16.627	
14,100.00	9,713.12	13,977.19	9,742.00	50.10	50.36	89.689	3,959.30	262.67	1,648.57	1,548.16	100.41	16.419	
14,200.00	9,712.77	14,077.19	9,742.00	50.73	51.00	89.689	4,059.30	262.13	1,648.57	1,546.89	101.68	16.214	
14,300.00	9,712.41	14,177.19	9,742.00	51.37	51.64	89.689	4,159.30	261.59	1,648.57	1,545.61	102.96	16.012	
14,400.00	9,712.05	14,277.19	9,742.00	52.02	52.30	89.689	4,259.30	261.04	1,648.57	1,544.31	104.26	15.812	
14,500.00	9,711.70	14,377.19	9,742.00	52.67	52.95	89.689	4,359.29	260.50	1,648.57	1,543.00	105.57	15.616	
14,600.00	9,711.34	14,477.19	9,742.00	53.33	53.62	89.689	4,459.29	259.96	1,648.57	1,541.68	106.89	15.423	
14,700.00	9,710.98	14,577.19	9,742.00	53.99	54.29	89.689	4,559.29	259.42	1,648.58	1,540.35	108.23	15.233	
14,800.00	9,710.62	14,677.19	9,742.00	54.66	54.96	89.689	4,659.29	258.88	1,648.58	1,539.01	109.57	15.046	
14,900.00	9,710.27	14,777.18	9,742.00	55.34	55.64	89.689	4,759.29	258.33	1,648.58	1,537.65	110.93	14.862	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 121H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR														Offset Site Error:	0.00 usft
Reference Offset														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Minimum Separation (usft)	Separation Factor	Warning			
15,000.00	9,709.91	14,877.18	9,742.00	56.02	56.33	89.689	4,859.28	257.79	1,648.58	1,536.29	112.29	14.681			
15,100.00	9,709.55	14,977.18	9,742.00	56.70	57.02	89.689	4,959.28	257.25	1,648.58	1,534.91	113.67	14.503			
15,200.00	9,709.19	15,077.18	9,742.00	57.39	57.72	89.689	5,059.28	256.71	1,648.58	1,533.53	115.06	14.328			
15,300.00	9,708.84	15,177.18	9,742.00	58.09	58.42	89.689	5,159.28	256.16	1,648.59	1,532.13	116.45	14.157			
15,400.00	9,708.48	15,277.18	9,742.00	58.79	59.12	89.689	5,259.28	255.62	1,648.59	1,530.73	117.86	13.988			
15,500.00	9,708.12	15,377.18	9,742.00	59.49	59.83	89.689	5,359.27	255.08	1,648.59	1,529.32	119.27	13.822			
15,600.00	9,707.77	15,477.18	9,742.00	60.20	60.54	89.689	5,459.27	254.54	1,648.59	1,527.90	120.69	13.660			
15,700.00	9,707.41	15,577.18	9,742.00	60.91	61.26	89.689	5,559.27	254.00	1,648.60	1,526.47	122.12	13.500			
15,800.00	9,707.05	15,677.18	9,742.00	61.63	61.98	89.689	5,659.27	253.45	1,648.60	1,525.04	123.56	13.343			
15,900.00	9,706.69	15,777.18	9,742.00	62.35	62.70	89.689	5,759.26	252.91	1,648.60	1,523.60	125.00	13.188			
16,000.00	9,706.34	15,877.18	9,742.00	63.07	63.43	89.689	5,859.26	252.37	1,648.60	1,522.15	126.46	13.037			
16,100.00	9,705.98	15,977.18	9,742.00	63.80	64.16	89.689	5,959.26	251.83	1,648.61	1,520.69	127.91	12.888			
16,200.00	9,705.62	16,077.18	9,742.00	64.53	64.90	89.689	6,059.26	251.28	1,648.61	1,519.23	129.38	12.742			
16,300.00	9,705.27	16,177.18	9,742.00	65.27	65.64	89.689	6,159.26	250.74	1,648.61	1,517.76	130.85	12.599			
16,400.00	9,704.91	16,277.18	9,742.00	66.00	66.38	89.689	6,259.25	250.20	1,648.61	1,516.28	132.33	12.458			
16,500.00	9,704.55	16,377.17	9,742.00	66.74	67.12	89.689	6,359.25	249.66	1,648.62	1,514.80	133.82	12.320			
16,600.00	9,704.19	16,477.17	9,742.00	67.49	67.87	89.689	6,459.25	249.11	1,648.62	1,513.31	135.31	12.184			
16,700.00	9,703.84	16,577.17	9,742.00	68.23	68.62	89.689	6,559.25	248.57	1,648.62	1,511.82	136.80	12.051			
16,800.00	9,703.48	16,677.17	9,742.00	68.98	69.37	89.689	6,659.25	248.03	1,648.63	1,510.32	138.31	11.920			
16,900.00	9,703.12	16,777.17	9,742.00	69.73	70.13	89.689	6,759.24	247.49	1,648.63	1,508.81	139.81	11.792			
17,000.00	9,702.76	16,877.17	9,742.00	70.49	70.89	89.689	6,859.24	246.95	1,648.63	1,507.30	141.33	11.665			
17,100.00	9,702.41	16,977.17	9,742.00	71.25	71.65	89.689	6,959.24	246.40	1,648.64	1,505.79	142.84	11.541			
17,200.00	9,702.05	17,077.17	9,742.00	72.01	72.41	89.689	7,059.24	245.86	1,648.64	1,504.27	144.37	11.420			
17,300.00	9,701.69	17,177.17	9,742.00	72.77	73.17	89.689	7,159.24	245.32	1,648.64	1,502.75	145.89	11.300			
17,400.00	9,701.34	17,277.17	9,742.00	73.53	73.94	89.689	7,259.23	244.78	1,648.65	1,501.22	147.43	11.183			
17,500.00	9,700.98	17,377.17	9,742.00	74.30	74.71	89.689	7,359.23	244.23	1,648.65	1,499.69	148.96	11.068			
17,600.00	9,700.62	17,477.17	9,742.00	75.07	75.48	89.689	7,459.23	243.69	1,648.65	1,498.15	150.50	10.954			
17,700.00	9,700.26	17,577.17	9,742.00	75.84	76.26	89.689	7,559.23	243.15	1,648.66	1,496.61	152.05	10.843			
17,800.00	9,699.91	17,677.17	9,742.00	76.61	77.03	89.689	7,659.22	242.61	1,648.66	1,495.06	153.60	10.734			
17,900.00	9,699.55	17,777.17	9,742.00	77.39	77.81	89.689	7,759.22	242.07	1,648.66	1,493.52	155.15	10.626			
18,000.00	9,699.19	17,877.17	9,742.00	78.16	78.59	89.689	7,859.22	241.52	1,648.67	1,491.96	156.71	10.521			
18,100.00	9,698.83	17,977.16	9,742.00	78.94	79.37	89.689	7,959.22	240.98	1,648.67	1,490.41	158.27	10.417			
18,200.00	9,698.48	18,077.16	9,742.00	79.72	80.15	89.689	8,059.22	240.44	1,648.68	1,488.85	159.83	10.315			
18,300.00	9,698.12	18,177.16	9,742.00	80.51	80.94	89.689	8,159.21	239.90	1,648.68	1,487.28	161.40	10.215			
18,400.00	9,697.76	18,277.16	9,742.00	81.29	81.72	89.689	8,259.21	239.35	1,648.69	1,485.72	162.97	10.117			
18,500.00	9,697.41	18,377.16	9,742.00	82.08	82.51	89.689	8,359.21	238.81	1,648.69	1,484.15	164.54	10.020			
18,600.00	9,697.05	18,477.16	9,742.00	82.86	83.30	89.689	8,459.21	238.27	1,648.69	1,482.58	166.12	9.925			
18,700.00	9,696.69	18,577.16	9,742.00	83.65	84.09	89.689	8,559.21	237.73	1,648.70	1,481.00	167.70	9.831			
18,800.00	9,696.33	18,677.16	9,742.00	84.44	84.89	89.689	8,659.20	237.19	1,648.70	1,479.42	169.28	9.739			
18,900.00	9,695.98	18,777.16	9,742.00	85.24	85.68	89.689	8,759.20	236.64	1,648.71	1,477.84	170.87	9.649			
19,000.00	9,695.62	18,877.16	9,742.00	86.03	86.48	89.689	8,859.20	236.10	1,648.71	1,476.26	172.46	9.560			
19,100.00	9,695.26	18,977.16	9,742.00	86.82	87.27	89.689	8,959.20	235.56	1,648.72	1,474.67	174.05	9.473			
19,200.00	9,694.91	19,077.16	9,742.00	87.62	88.07	89.689	9,059.20	235.02	1,648.72	1,473.08	175.64	9.387			
19,300.00	9,694.55	19,177.16	9,742.00	88.42	88.87	89.689	9,159.19	234.47	1,648.73	1,471.49	177.24	9.302			
19,400.00	9,694.19	19,277.16	9,742.00	89.22	89.67	89.689	9,259.19	233.93	1,648.73	1,469.90	178.84	9.219			
19,500.00	9,693.83	19,377.16	9,742.00	90.02	90.47	89.689	9,359.19	233.39	1,648.74	1,468.30	180.44	9.137			
19,600.00	9,693.48	19,477.15	9,742.00	90.82	91.28	89.689	9,459.19	232.85	1,648.74	1,466.70	182.04	9.057			
19,700.00	9,693.12	19,577.15	9,742.00	91.62	92.08	89.689	9,559.18	232.30	1,648.75	1,465.10	183.65	8.978			
19,800.00	9,692.76	19,677.15	9,742.00	92.43	92.89	89.689	9,659.18	231.76	1,648.76	1,463.50	185.26	8.900			
19,900.00	9,692.40	19,777.15	9,742.00	93.23	93.69	89.689	9,759.18	231.22	1,648.76	1,461.89	186.87	8.823			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 121H - Wellbore #1 - Design #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis												
Measured	Vertical	Measured	Vertical	Reference	Offset	Azimuth	Offset Wellbore Centre	Distance	Rule Assigned:					
Depth	Depth	Depth	Depth			from North	+N/-S	+E/-W	Between	Between	Minimum	Separation	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Ellipses	Separation	Factor		
									(usft)	(usft)	(usft)			
20,000.00	9,692.05	19,877.15	9,742.00	94.04	94.50	89.689	9,859.18	230.68	1,648.77	1,460.28	188.48	8.748		
20,100.00	9,691.69	19,977.15	9,742.00	94.84	95.31	89.689	9,959.18	230.14	1,648.77	1,458.67	190.10	8.673		
20,150.35	9,691.51	20,027.50	9,742.00	95.25	95.72	89.689	10,009.52	229.86	1,648.77	1,457.86	190.91	8.636		



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 125H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Site Error: 0.00 usft
Reference Offset				Semi Major Axis		Offset Wellbore Centre			Rule Assigned: Distance				Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Azimuth from North (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-89.968	0.04	-80.11	80.11				
100.00	100.00	100.00	100.00	0.26	0.26	-89.968	0.04	-80.11	80.11	79.59	0.53	152.033	
200.00	200.00	200.00	200.00	0.62	0.62	-89.968	0.04	-80.11	80.11	78.87	1.24	64.406	
300.00	300.00	300.00	300.00	0.98	0.98	-89.968	0.04	-80.11	80.11	78.15	1.96	40.857	
400.00	400.00	400.00	400.00	1.34	1.34	-89.968	0.04	-80.11	80.11	77.44	2.68	29.918	
500.00	500.00	500.00	500.00	1.70	1.70	-89.968	0.04	-80.11	80.11	76.72	3.39	23.600	
600.00	600.00	600.00	600.00	2.06	2.06	-89.968	0.04	-80.11	80.11	76.00	4.11	19.485	
700.00	700.00	700.00	700.00	2.41	2.41	-89.968	0.04	-80.11	80.11	75.29	4.83	16.592	
800.00	800.00	800.00	800.00	2.77	2.77	-89.968	0.04	-80.11	80.11	74.57	5.55	14.447	
900.00	900.00	900.00	900.00	3.13	3.13	-89.968	0.04	-80.11	80.11	73.85	6.26	12.793	
1,000.00	1,000.00	1,000.00	1,000.00	3.49	3.49	-89.968	0.04	-80.11	80.11	73.13	6.98	11.479	
1,100.00	1,100.00	1,100.00	1,100.00	3.85	3.85	-89.968	0.04	-80.11	80.11	72.42	7.70	10.409	
1,200.00	1,200.00	1,200.00	1,200.00	4.21	4.21	-89.968	0.04	-80.11	80.11	71.70	8.41	9.522 CC	
1,300.00	1,300.00	1,298.93	1,298.92	4.57	4.55	-90.355	-0.50	-80.77	80.78	71.67	9.11	8.866 ES	
1,400.00	1,400.00	1,397.79	1,397.75	4.92	4.88	-91.476	-2.13	-82.74	82.80	73.01	9.80	8.453	
1,500.00	1,500.00	1,496.54	1,496.41	5.28	5.21	-93.226	-4.85	-86.02	86.24	75.75	10.48	8.227	
1,600.00	1,600.00	1,595.11	1,594.80	5.64	5.54	-95.447	-8.64	-90.60	91.16	80.00	11.17	8.164	
1,700.00	1,700.00	1,693.45	1,692.84	6.00	5.88	-97.965	-13.50	-96.47	97.67	85.82	11.85	8.243	
1,800.00	1,800.00	1,791.50	1,790.45	6.36	6.22	-100.610	-19.41	-103.61	105.85	93.32	12.53	8.448	
1,900.00	1,900.00	1,889.20	1,887.54	6.72	6.56	-103.243	-26.36	-112.00	115.74	102.53	13.21	8.764	
2,000.00	2,000.00	1,986.50	1,984.03	7.07	6.90	-105.760	-34.33	-121.63	127.39	113.51	13.88	9.180	
2,100.00	2,100.00	2,085.33	2,081.91	7.43	7.25	-108.043	-43.06	-132.17	140.18	125.61	14.57	9.621	
2,200.00	2,200.00	2,184.37	2,179.99	7.79	7.60	-109.948	-51.81	-142.74	153.17	137.90	15.27	10.032	
2,300.00	2,300.00	2,283.40	2,278.07	8.15	7.95	-111.554	-60.56	-153.31	166.29	150.32	15.97	10.415	
2,400.00	2,400.00	2,382.44	2,376.15	8.51	8.30	-112.925	-69.31	-163.88	179.53	162.86	16.67	10.771	
2,500.00	2,500.00	2,481.47	2,474.23	8.87	8.66	-114.107	-78.06	-174.45	192.85	175.48	17.37	11.103	
2,600.00	2,600.00	2,580.51	2,572.31	9.23	9.02	-115.136	-86.81	-185.02	206.25	188.17	18.07	11.413	
2,700.00	2,700.00	2,679.55	2,670.39	9.58	9.38	-116.039	-95.56	-195.59	219.70	200.92	18.78	11.701	
2,800.00	2,800.00	2,778.58	2,768.47	9.94	9.74	-116.839	-104.32	-206.17	233.20	213.72	19.48	11.971	
2,900.00	2,900.00	2,877.62	2,866.55	10.30	10.10	-117.550	-113.07	-216.74	246.73	226.55	20.18	12.224	
3,000.00	3,000.00	2,976.65	2,964.63	10.66	10.46	-118.188	-121.82	-227.31	260.31	239.42	20.89	12.460	
3,100.00	3,099.99	3,075.85	3,062.87	11.01	10.82	-118.799	-130.59	-237.89	272.62	251.03	21.58	12.630	
3,200.00	3,199.91	3,175.32	3,161.38	11.34	11.19	-119.433	-139.38	-248.51	282.38	260.11	22.27	12.681	
3,300.00	3,299.69	3,275.00	3,260.10	11.68	11.55	-120.105	-148.18	-259.15	289.60	266.64	22.96	12.615	
3,400.00	3,399.27	3,374.82	3,358.96	12.02	11.92	-120.828	-157.01	-269.81	294.28	270.63	23.65	12.445	
3,500.00	3,498.57	3,474.71	3,457.89	12.36	12.28	-121.618	-165.83	-280.47	296.42	272.09	24.34	12.180	
3,600.00	3,597.54	3,574.61	3,556.82	12.70	12.65	-122.494	-174.66	-291.13	296.05	271.02	25.03	11.828	
3,700.00	3,696.09	3,674.44	3,655.69	13.04	13.02	-123.477	-183.48	-301.79	293.19	267.47	25.72	11.398	
3,800.00	3,794.16	3,774.14	3,754.43	13.39	13.39	-124.597	-192.29	-312.43	287.87	261.45	26.41	10.898	
3,900.00	3,891.70	3,873.63	3,852.96	13.74	13.76	-125.890	-201.08	-323.05	280.12	253.02	27.11	10.334	
4,000.00	3,988.62	3,972.86	3,951.23	14.09	14.12	-127.405	-209.85	-333.64	270.02	242.22	27.80	9.714	
4,100.00	4,085.12	4,071.88	4,049.29	14.44	14.49	-129.145	-218.60	-344.21	258.56	230.07	28.49	9.076	
4,200.00	4,181.62	4,170.90	4,147.36	14.80	14.86	-131.046	-227.35	-354.77	247.33	218.14	29.18	8.476	
4,300.00	4,278.12	4,269.92	4,245.42	15.16	15.22	-133.125	-236.10	-365.34	236.39	206.51	29.88	7.912	
4,400.00	4,374.62	4,368.94	4,343.49	15.52	15.59	-135.402	-244.85	-375.91	225.78	195.20	30.58	7.383	
4,500.00	4,471.12	4,467.96	4,441.55	15.89	15.96	-137.899	-253.60	-386.48	215.56	184.28	31.29	6.890	
4,600.00	4,567.62	4,566.98	4,539.62	16.26	16.32	-140.638	-262.35	-397.05	205.79	173.78	32.00	6.430	
4,700.00	4,664.11	4,666.00	4,637.68	16.63	16.69	-143.642	-271.11	-407.62	196.52	163.79	32.72	6.005	
4,800.00	4,760.61	4,765.02	4,735.74	17.00	17.06	-146.932	-279.86	-418.19	187.83	154.37	33.45	5.614	
4,900.00	4,857.11	4,864.03	4,833.81	17.37	17.43	-150.526	-288.61	-428.76	179.80	145.61	34.20	5.258	
5,000.00	4,953.61	4,963.05	4,931.87	17.75	17.80	-154.435	-297.36	-439.33	172.54	137.59	34.95	4.937	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 125H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR										Rule Assigned:				Offset Site Error:
Reference Offset										Distance Between Centres				Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,100.00	5,050.11	5,062.07	5,029.94	18.12	18.16	-158.662	-306.11	-449.89	166.14	130.42	35.72	4.651		
5,200.00	5,146.61	5,161.09	5,128.00	18.50	18.53	-163.195	-314.86	-460.46	160.70	124.19	36.50	4.402		
5,300.00	5,243.11	5,260.11	5,226.06	18.88	18.90	-168.006	-323.61	-471.03	156.32	119.02	37.30	4.191		
5,400.00	5,339.61	5,359.13	5,324.13	19.26	19.27	-173.049	-332.36	-481.60	153.10	114.98	38.11	4.017		
5,500.00	5,436.11	5,458.15	5,422.19	19.65	19.64	-178.258	-341.11	-492.17	151.10	112.17	38.93	3.881		
5,600.00	5,532.60	5,557.17	5,520.26	20.03	20.01	176.448	-349.86	-502.74	150.38	110.63	39.75	3.783		
5,605.62	5,538.03	5,562.74	5,525.77	20.05	20.03	176.150	-350.35	-503.33	150.38	110.58	39.80	3.779		
5,700.00	5,629.10	5,656.19	5,618.32	20.41	20.38	171.158	-358.61	-513.31	150.95	110.38	40.57	3.721		
5,800.00	5,725.60	5,755.21	5,716.39	20.80	20.74	165.961	-367.36	-523.88	152.81	111.42	41.39	3.692		
5,900.00	5,822.10	5,854.23	5,814.45	21.19	21.11	160.936	-376.11	-534.45	155.90	113.71	42.19	3.695		
6,000.00	5,918.60	5,953.25	5,912.51	21.58	21.48	156.147	-384.86	-545.01	160.15	117.17	42.98	3.726		
6,100.00	6,015.10	6,052.27	6,010.58	21.96	21.85	151.639	-393.61	-555.58	165.48	121.72	43.75	3.782		
6,200.00	6,111.60	6,151.29	6,108.64	22.35	22.22	147.440	-402.36	-566.15	171.78	127.26	44.51	3.859		
6,300.00	6,208.10	6,250.31	6,206.71	22.74	22.59	143.558	-411.11	-576.72	178.95	133.68	45.26	3.953		
6,400.00	6,304.59	6,349.33	6,304.77	23.14	22.96	139.992	-419.86	-587.29	186.89	140.89	46.00	4.063		
6,500.00	6,401.09	6,448.35	6,402.84	23.53	23.33	136.728	-428.61	-597.86	195.51	148.78	46.73	4.184		
6,600.00	6,497.59	6,547.37	6,500.90	23.92	23.70	133.748	-437.36	-608.43	204.72	157.26	47.46	4.314		
6,700.00	6,594.09	6,646.38	6,598.96	24.32	24.07	131.030	-446.11	-619.00	214.44	166.27	48.17	4.451		
6,800.00	6,690.59	6,745.40	6,697.03	24.71	24.44	128.553	-454.86	-629.57	224.62	175.73	48.89	4.595		
6,900.00	6,787.09	6,843.52	6,794.29	25.10	24.80	126.102	-463.09	-639.51	235.35	185.76	49.59	4.746		
7,000.00	6,883.59	6,941.13	6,891.25	25.50	25.17	123.487	-470.23	-648.13	246.96	196.69	50.27	4.912		
7,100.00	6,980.09	7,038.25	6,987.91	25.90	25.52	120.758	-476.29	-655.45	259.60	208.66	50.94	5.096		
7,200.00	7,076.59	7,134.83	7,084.17	26.29	25.87	117.961	-481.28	-661.48	273.39	221.80	51.59	5.299		
7,300.00	7,173.08	7,230.82	7,179.96	26.69	26.22	115.140	-485.21	-666.22	288.46	236.24	52.22	5.524		
7,400.00	7,269.58	7,326.18	7,275.21	27.09	26.56	112.334	-488.10	-669.72	304.92	252.08	52.83	5.771		
7,500.00	7,366.08	7,420.86	7,369.84	27.49	26.89	109.576	-489.97	-671.98	322.85	269.42	53.43	6.043		
7,600.00	7,462.58	7,514.80	7,463.77	27.88	27.22	106.894	-490.84	-673.03	342.32	288.31	54.00	6.339		
7,700.00	7,559.08	7,610.11	7,559.08	28.28	27.54	104.347	-490.92	-673.11	363.21	308.63	54.58	6.655		
7,800.00	7,655.58	7,706.61	7,655.58	28.68	27.85	102.066	-490.92	-673.11	384.81	329.64	55.17	6.975		
7,900.00	7,752.08	7,803.11	7,752.08	29.08	28.17	100.032	-490.92	-673.11	406.95	351.18	55.77	7.297		
8,000.00	7,848.58	7,899.60	7,848.58	29.48	28.49	98.209	-490.92	-673.11	429.56	373.18	56.38	7.618		
8,100.00	7,945.08	7,996.10	7,945.08	29.88	28.81	96.570	-490.92	-673.11	452.56	395.56	57.00	7.939		
8,200.00	8,041.64	8,092.67	8,041.64	30.28	29.12	95.104	-490.92	-673.11	475.66	418.04	57.63	8.254		
8,300.00	8,138.76	8,189.79	8,138.76	30.68	29.45	93.880	-490.92	-673.11	497.10	438.84	58.26	8.532		
8,400.00	8,236.47	8,287.50	8,236.47	31.07	29.77	92.874	-490.92	-673.11	516.42	457.51	58.91	8.766		
8,500.00	8,334.70	8,385.73	8,334.70	31.45	30.10	92.049	-490.92	-673.11	533.53	473.96	59.57	8.957		
8,600.00	8,433.39	8,484.42	8,433.39	31.83	30.42	91.380	-490.92	-673.11	548.36	488.14	60.23	9.105		
8,700.00	8,532.47	8,583.50	8,532.47	32.19	30.75	90.845	-490.92	-673.11	560.87	499.98	60.90	9.210		
8,800.00	8,631.86	8,682.89	8,631.86	32.56	31.09	90.430	-490.92	-673.11	571.02	509.44	61.57	9.274		
8,900.00	8,731.51	8,782.54	8,731.51	32.91	31.42	90.124	-490.92	-673.11	578.76	516.51	62.25	9.297		
9,000.00	8,831.35	8,882.37	8,831.35	33.26	31.75	89.919	-490.92	-673.11	584.09	521.16	62.93	9.282		
9,100.00	8,931.30	8,982.32	8,931.30	33.61	32.09	89.808	-490.92	-673.11	586.99	523.38	63.61	9.227		
9,200.00	9,031.29	9,082.32	9,031.29	33.94	32.42	89.787	-490.92	-673.11	587.56	523.27	64.29	9.139		
9,300.00	9,131.29	9,182.32	9,131.29	34.27	32.76	89.787	-490.92	-673.11	587.56	522.60	64.96	9.045		
9,400.00	9,231.06	9,286.05	9,234.82	34.59	33.11	89.825	-486.15	-673.36	588.04	522.37	65.68	8.954		
9,500.00	9,328.48	9,391.43	9,337.49	34.90	33.44	89.705	-463.11	-674.57	589.92	523.56	66.36	8.890		
9,600.00	9,420.59	9,496.67	9,434.08	35.18	33.74	89.405	-421.77	-676.74	593.17	526.19	66.98	8.856		
9,700.00	9,504.61	9,601.57	9,521.23	35.42	33.99	88.972	-363.72	-679.78	597.69	530.17	67.52	8.852		
9,800.00	9,577.97	9,705.94	9,595.99	35.60	34.19	88.468	-291.19	-683.58	603.36	535.38	67.98	8.876		
9,900.00	9,638.46	9,809.65	9,656.02	35.72	34.35	87.962	-206.91	-688.00	610.02	541.67	68.35	8.924		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 125H - Wellbore #1 - Design #1														Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+SAG+FDIR														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
10,000.00	9,684.22	9,912.59	9,699.62	35.79	34.46	87.519	-113.94	-692.87	617.48	548.83	68.65	8.995			
10,100.00	9,713.87	10,014.71	9,725.75	35.81	34.54	87.187	-15.50	-698.03	625.52	556.66	68.87	9.083			
10,200.00	9,726.51	10,112.07	9,734.00	35.81	34.60	87.348	81.26	-703.10	633.93	564.90	69.02	9.184			
10,300.00	9,726.69	10,200.00	9,734.00	35.80	34.65	88.394	169.13	-706.35	643.01	573.81	69.20	9.293			
10,400.00	9,726.34	10,285.07	9,734.00	35.79	34.71	89.689	254.19	-707.19	651.33	581.92	69.41	9.384			
10,500.00	9,725.98	10,384.92	9,734.00	35.78	34.82	89.689	354.04	-707.74	656.71	587.06	69.65	9.429			
10,600.00	9,725.63	10,484.90	9,734.00	35.77	34.95	89.689	454.01	-708.28	658.60	588.67	69.94	9.417			
10,700.00	9,725.27	10,584.89	9,734.00	35.76	35.10	89.689	554.01	-708.82	658.61	588.34	70.26	9.373			
10,800.00	9,724.91	10,684.89	9,734.00	35.75	35.28	89.689	654.01	-709.36	658.61	587.97	70.63	9.324			
10,900.00	9,724.56	10,784.89	9,734.00	35.75	35.48	89.689	754.01	-709.91	658.60	587.56	71.04	9.271			
11,000.00	9,724.20	10,884.89	9,734.00	35.75	35.71	89.689	854.00	-710.45	658.60	587.11	71.49	9.212			
11,100.00	9,723.84	10,984.89	9,734.00	35.95	35.95	89.689	954.00	-710.99	658.60	586.62	71.98	9.150			
11,200.00	9,723.48	11,084.89	9,734.00	36.22	36.21	89.689	1,054.00	-711.54	658.60	586.10	72.51	9.083			
11,242.18	9,723.33	11,127.07	9,734.00	36.34	36.33	89.689	1,096.18	-711.76	658.60	585.86	72.74	9.054			
11,300.00	9,723.13	11,184.89	9,734.00	36.50	36.50	89.689	1,154.00	-712.08	658.60	585.53	73.07	9.013			
11,400.00	9,722.77	11,284.89	9,734.00	36.80	36.80	89.689	1,254.00	-712.62	658.60	584.93	73.67	8.940			
11,500.00	9,722.41	11,384.89	9,734.00	37.12	37.12	89.689	1,353.99	-713.16	658.60	584.30	74.31	8.863			
11,600.00	9,722.06	11,484.89	9,734.00	37.45	37.46	89.689	1,453.99	-713.71	658.60	583.63	74.98	8.784			
11,700.00	9,721.70	11,584.89	9,734.00	37.80	37.82	89.689	1,553.99	-714.25	658.61	582.92	75.68	8.702			
11,800.00	9,721.34	11,684.89	9,734.00	38.17	38.19	89.689	1,653.99	-714.79	658.61	582.19	76.42	8.618			
11,900.00	9,720.98	11,784.89	9,734.00	38.55	38.58	89.689	1,753.98	-715.34	658.61	581.42	77.19	8.532			
12,000.00	9,720.63	11,884.89	9,734.00	38.95	38.98	89.689	1,853.98	-715.88	658.61	580.62	77.99	8.445			
12,100.00	9,720.27	11,984.89	9,734.00	39.37	39.40	89.689	1,953.98	-716.42	658.61	579.79	78.82	8.356			
12,200.00	9,719.91	12,084.88	9,734.00	39.79	39.83	89.689	2,053.98	-716.96	658.61	578.93	79.68	8.265			
12,300.00	9,719.55	12,184.88	9,734.00	40.24	40.28	89.689	2,153.98	-717.51	658.61	578.04	80.57	8.174			
12,400.00	9,719.20	12,284.88	9,734.00	40.69	40.74	89.689	2,253.97	-718.05	658.62	577.13	81.49	8.083			
12,500.00	9,718.84	12,384.88	9,734.00	41.16	41.21	89.689	2,353.97	-718.59	658.62	576.19	82.43	7.990			
12,600.00	9,718.48	12,484.88	9,734.00	41.64	41.70	89.689	2,453.97	-719.14	658.62	575.23	83.40	7.898			
12,700.00	9,718.13	12,584.88	9,734.00	42.13	42.20	89.689	2,553.97	-719.68	658.62	574.24	84.39	7.805			
12,800.00	9,717.77	12,684.88	9,734.00	42.64	42.71	89.689	2,653.97	-720.22	658.63	573.22	85.40	7.712			
12,900.00	9,717.41	12,784.88	9,734.00	43.15	43.23	89.689	2,753.96	-720.76	658.63	572.19	86.44	7.619			
13,000.00	9,717.05	12,884.88	9,734.00	43.68	43.76	89.689	2,853.96	-721.31	658.63	571.13	87.50	7.527			
13,100.00	9,716.70	12,984.88	9,734.00	44.22	44.31	89.689	2,953.96	-721.85	658.64	570.05	88.59	7.435			
13,200.00	9,716.34	13,084.88	9,734.00	44.77	44.86	89.689	3,053.96	-722.39	658.64	568.95	89.69	7.344			
13,300.00	9,715.98	13,184.88	9,734.00	45.32	45.42	89.689	3,153.96	-722.94	658.64	567.83	90.81	7.253			
13,400.00	9,715.62	13,284.88	9,734.00	45.89	45.99	89.689	3,253.95	-723.48	658.65	566.70	91.95	7.163			
13,500.00	9,715.27	13,384.88	9,734.00	46.47	46.58	89.689	3,353.95	-724.02	658.65	565.54	93.11	7.074			
13,600.00	9,714.91	13,484.88	9,734.00	47.05	47.17	89.689	3,453.95	-724.56	658.66	564.37	94.29	6.986			
13,700.00	9,714.55	13,584.88	9,734.00	47.65	47.77	89.689	3,553.95	-725.11	658.66	563.18	95.48	6.898			
13,800.00	9,714.20	13,684.87	9,734.00	48.25	48.37	89.689	3,653.94	-725.65	658.67	561.97	96.69	6.812			
13,900.00	9,713.84	13,784.87	9,734.00	48.86	48.99	89.689	3,753.94	-726.19	658.67	560.75	97.92	6.727			
14,000.00	9,713.48	13,884.87	9,734.00	49.48	49.61	89.689	3,853.94	-726.74	658.68	559.51	99.16	6.642			
14,100.00	9,713.12	13,984.87	9,734.00	50.10	50.24	89.689	3,953.94	-727.28	658.68	558.26	100.42	6.559			
14,200.00	9,712.77	14,084.87	9,734.00	50.73	50.88	89.689	4,053.94	-727.82	658.69	557.00	101.69	6.477			
14,300.00	9,712.41	14,184.87	9,734.00	51.37	51.52	89.689	4,153.93	-728.36	658.69	555.72	102.97	6.397			
14,400.00	9,712.05	14,284.87	9,734.00	52.02	52.17	89.689	4,253.93	-728.91	658.70	554.43	104.27	6.317			
14,500.00	9,711.70	14,384.87	9,734.00	52.67	52.83	89.689	4,353.93	-729.45	658.71	553.13	105.58	6.239			
14,600.00	9,711.34	14,484.87	9,734.00	53.33	53.49	89.689	4,453.93	-729.99	658.71	551.81	106.90	6.162			
14,700.00	9,710.98	14,584.87	9,734.00	53.99	54.16	89.689	4,553.93	-730.54	658.72	550.49	108.23	6.086			
14,800.00	9,710.62	14,684.87	9,734.00	54.66	54.83	89.689	4,653.92	-731.08	658.73	549.15	109.58	6.012			
14,900.00	9,710.27	14,784.87	9,734.00	55.34	55.51	89.689	4,753.92	-731.62	658.73	547.80	110.93	5.938			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 125H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR													Offset Site Error: 0.00 usft
Rule Assigned: Distance Between Centres (usft) Between Ellipses (usft) Minimum Separation (usft) Separation Factor													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Azimuth from North (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,000.00	9,709.91	14,884.87	9,734.00	56.02	56.19	89.689	4,853.92	-732.16	658.74	546.44	112.30	5.866	
15,100.00	9,709.55	14,984.87	9,734.00	56.70	56.88	89.689	4,953.92	-732.71	658.75	545.07	113.67	5.795	
15,200.00	9,709.19	15,084.87	9,734.00	57.39	57.58	89.689	5,053.92	-733.25	658.76	543.70	115.06	5.725	
15,300.00	9,708.84	15,184.87	9,734.00	58.09	58.28	89.689	5,153.91	-733.79	658.76	542.31	116.45	5.657	
15,400.00	9,708.48	15,284.86	9,734.00	58.79	58.98	89.689	5,253.91	-734.34	658.77	540.91	117.86	5.590	
15,500.00	9,708.12	15,384.86	9,734.00	59.49	59.69	89.689	5,353.91	-734.88	658.78	539.51	119.27	5.524	
15,600.00	9,707.77	15,484.86	9,734.00	60.20	60.40	89.689	5,453.91	-735.42	658.79	538.10	120.69	5.459	
15,700.00	9,707.41	15,584.86	9,734.00	60.91	61.11	89.689	5,553.90	-735.96	658.80	536.68	122.12	5.395	
15,800.00	9,707.05	15,684.86	9,734.00	61.63	61.83	89.689	5,653.90	-736.51	658.80	535.25	123.55	5.332	
15,900.00	9,706.69	15,784.86	9,734.00	62.35	62.56	89.689	5,753.90	-737.05	658.81	533.82	125.00	5.271	
16,000.00	9,706.34	15,884.86	9,734.00	63.07	63.28	89.689	5,853.90	-737.59	658.82	532.38	126.45	5.210	
16,100.00	9,705.98	15,984.86	9,734.00	63.80	64.01	89.689	5,953.90	-738.14	658.83	530.93	127.91	5.151	
16,200.00	9,705.62	16,084.86	9,734.00	64.53	64.75	89.689	6,053.89	-738.68	658.84	529.47	129.37	5.093	
16,300.00	9,705.27	16,184.86	9,734.00	65.27	65.48	89.689	6,153.89	-739.22	658.85	528.01	130.84	5.036	
16,400.00	9,704.91	16,284.86	9,734.00	66.00	66.22	89.689	6,253.89	-739.76	658.86	526.54	132.32	4.979	
16,500.00	9,704.55	16,384.86	9,734.00	66.74	66.97	89.689	6,353.89	-740.31	658.87	525.07	133.80	4.924	
16,600.00	9,704.19	16,484.86	9,734.00	67.49	67.71	89.689	6,453.89	-740.85	658.88	523.59	135.29	4.870	
16,700.00	9,703.84	16,584.86	9,734.00	68.23	68.46	89.689	6,553.88	-741.39	658.89	522.11	136.79	4.817	
16,800.00	9,703.48	16,684.86	9,734.00	68.98	69.21	89.689	6,653.88	-741.94	658.90	520.62	138.29	4.765	
16,900.00	9,703.12	16,784.86	9,734.00	69.73	69.97	89.689	6,753.88	-742.48	658.91	519.12	139.79	4.714	
17,000.00	9,702.76	16,884.85	9,734.00	70.49	70.72	89.689	6,853.88	-743.02	658.92	517.62	141.30	4.663	
17,100.00	9,702.41	16,984.85	9,734.00	71.25	71.48	89.689	6,953.87	-743.56	658.94	516.12	142.82	4.614	
17,200.00	9,702.05	17,084.85	9,734.00	72.01	72.25	89.689	7,053.87	-744.11	658.95	514.61	144.34	4.565	
17,300.00	9,701.69	17,184.85	9,734.00	72.77	73.01	89.689	7,153.87	-744.65	658.96	513.09	145.87	4.518	
17,400.00	9,701.34	17,284.85	9,734.00	73.53	73.78	89.689	7,253.87	-745.19	658.97	511.58	147.40	4.471	
17,500.00	9,700.98	17,384.85	9,734.00	74.30	74.55	89.689	7,353.87	-745.74	658.98	510.05	148.93	4.425	
17,600.00	9,700.62	17,484.85	9,734.00	75.07	75.32	89.689	7,453.86	-746.28	658.99	508.53	150.47	4.380	
17,700.00	9,700.26	17,584.85	9,734.00	75.84	76.09	89.689	7,553.86	-746.82	659.01	507.00	152.01	4.335	
17,800.00	9,699.91	17,684.85	9,734.00	76.61	76.86	89.689	7,653.86	-747.36	659.02	505.46	153.56	4.292	
17,900.00	9,699.55	17,784.85	9,734.00	77.39	77.64	89.689	7,753.86	-747.91	659.03	503.93	155.11	4.249	
18,000.00	9,699.19	17,884.85	9,734.00	78.16	78.42	89.689	7,853.86	-748.45	659.05	502.38	156.66	4.207	
18,100.00	9,698.83	17,984.85	9,734.00	78.94	79.20	89.689	7,953.85	-748.99	659.06	500.84	158.22	4.165	
18,200.00	9,698.48	18,084.85	9,734.00	79.72	79.98	89.689	8,053.85	-749.54	659.07	499.29	159.78	4.125	
18,300.00	9,698.12	18,184.85	9,734.00	80.51	80.77	89.689	8,153.85	-750.08	659.09	497.74	161.34	4.085	
18,400.00	9,697.76	18,284.85	9,734.00	81.29	81.55	89.689	8,253.85	-750.62	659.10	496.19	162.91	4.046	
18,500.00	9,697.41	18,384.84	9,734.00	82.08	82.34	89.689	8,353.85	-751.16	659.11	494.63	164.48	4.007	
18,600.00	9,697.05	18,484.84	9,734.00	82.86	83.13	89.689	8,453.84	-751.71	659.13	493.07	166.06	3.969	
18,700.00	9,696.69	18,584.84	9,734.00	83.65	83.92	89.689	8,553.84	-752.25	659.14	491.51	167.63	3.932	
18,800.00	9,696.33	18,684.84	9,734.00	84.44	84.71	89.689	8,653.84	-752.79	659.16	489.94	169.21	3.895	
18,900.00	9,695.98	18,784.84	9,734.00	85.24	85.51	89.689	8,753.84	-753.34	659.17	488.37	170.80	3.859	
19,000.00	9,695.62	18,884.84	9,734.00	86.03	86.30	89.689	8,853.83	-753.88	659.19	486.80	172.38	3.824	
19,100.00	9,695.26	18,984.84	9,734.00	86.82	87.10	89.689	8,953.83	-754.42	659.20	485.23	173.97	3.789	
19,200.00	9,694.91	19,084.84	9,734.00	87.62	87.89	89.689	9,053.83	-754.96	659.22	483.66	175.56	3.755	
19,300.00	9,694.55	19,184.84	9,734.00	88.42	88.69	89.689	9,153.83	-755.51	659.23	482.08	177.15	3.721	
19,400.00	9,694.19	19,284.84	9,734.00	89.22	89.49	89.689	9,253.83	-756.05	659.25	480.50	178.75	3.688	
19,500.00	9,693.83	19,384.84	9,734.00	90.02	90.29	89.689	9,353.82	-756.59	659.26	478.92	180.35	3.656	
19,600.00	9,693.48	19,484.84	9,734.00	90.82	91.10	89.689	9,453.82	-757.14	659.28	477.33	181.95	3.623	
19,700.00	9,693.12	19,584.84	9,734.00	91.62	91.90	89.689	9,553.82	-757.68	659.30	475.74	183.55	3.592	
19,800.00	9,692.76	19,684.84	9,734.00	92.43	92.71	89.689	9,653.82	-758.22	659.31	474.16	185.16	3.561	
19,900.00	9,692.40	19,784.84	9,734.00	93.23	93.51	89.689	9,753.82	-758.76	659.33	472.57	186.76	3.530	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Offset Design: Double Stamp W2-1 (111H,115H,121H,125H) - Double Stamp Fed Com 125H - Wellbore #1 - Design #1

Survey Program: 0-MWD+IFR1+SAG+FDIR				Rule Assigned:				Offset Well Error: 0.00 usft					
Reference		Offset		Semi Major Axis		Azimuth from North (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			Minimum Separation (usft)
20,000.00	9,692.05	19,884.84	9,734.00	94.04	94.32	89.689	9,853.81	-759.31	659.35	470.97	188.37	3.500	
20,100.00	9,691.69	19,984.83	9,734.00	94.84	95.13	89.689	9,953.81	-759.85	659.36	469.38	189.98	3.471	
20,150.35	9,691.51	20,035.18	9,734.00	95.25	95.53	89.689	10,004.16	-760.12	659.37	468.58	190.79	3.456 SF	



MS Directional Anticollision Report

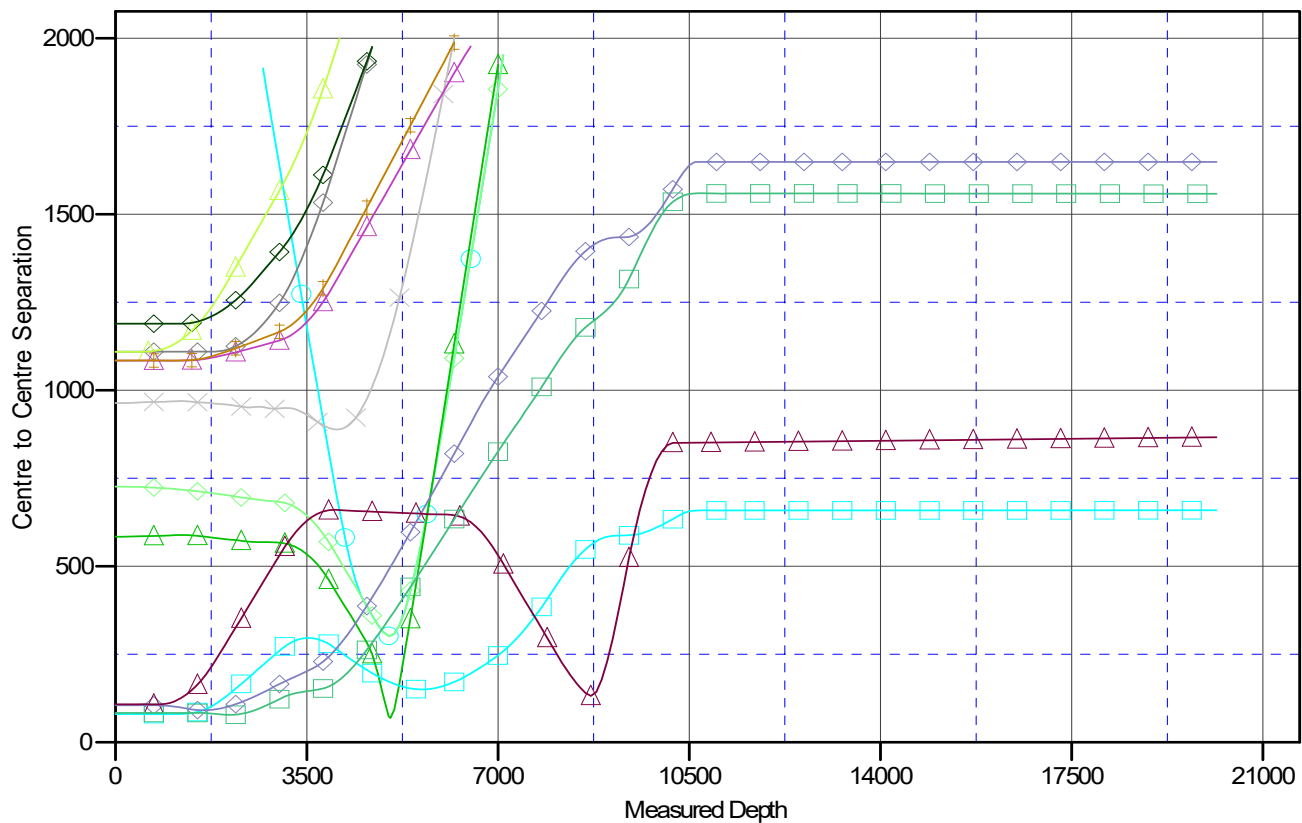


Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3557.50usft (26.5' KB)
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: Double Stamp Fed Com 122H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.319°

Ladder Plot



LEGEND

Belco AA Federal 2H, Wellbore #1, Surveys V0	Double Stamp Fed Com 121H, Wellbore #1, Design #1 V0	Double Stamp Fed Com 124H, Wellbore #1, Design #1 V0
Belco AA Federal 2H, Wellbore #1, MockSurveys (from Surface) V0	Double Stamp Fed Com 111H, Wellbore #1, Design #1 V0	Double Stamp Fed Com 123H, Wellbore #1, Design #1 V0
Queenie 15 1H, Wellbore #1, Surveys V0	Double Stamp Fed Com 115H, Wellbore #1, Design #1 V0	Double Stamp Fed Com 113H, Wellbore #1, Design #1 V0
Belco AA Federal 4H, Wellbore #1, Surveys V0	Double Stamp Fed Com 116H, Wellbore #1, Design #1 V0	
Double Stamp Fed Com 125H, Wellbore #1, Design #1 V0	Double Stamp Fed Com 126H, Wellbore #1, Design #1 V0	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



MS Directional Anticollision Report



Company:	Civitas Permian Operating, LLC	Local Co-ordinate Reference:	Well Double Stamp Fed Com 122H
Project:	Lea County, New Mexico (NAD 83)	TVD Reference:	WELL @ 3557.50usft (26.5' KB)
Reference Site:	Double Stamp Project	MD Reference:	WELL @ 3557.50usft (26.5' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	Double Stamp Fed Com 122H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	TRG_EDMConroe
Reference Design:	Design #0.0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3557.50usft (26.5' KB)

Offset Depths are relative to Offset Datum

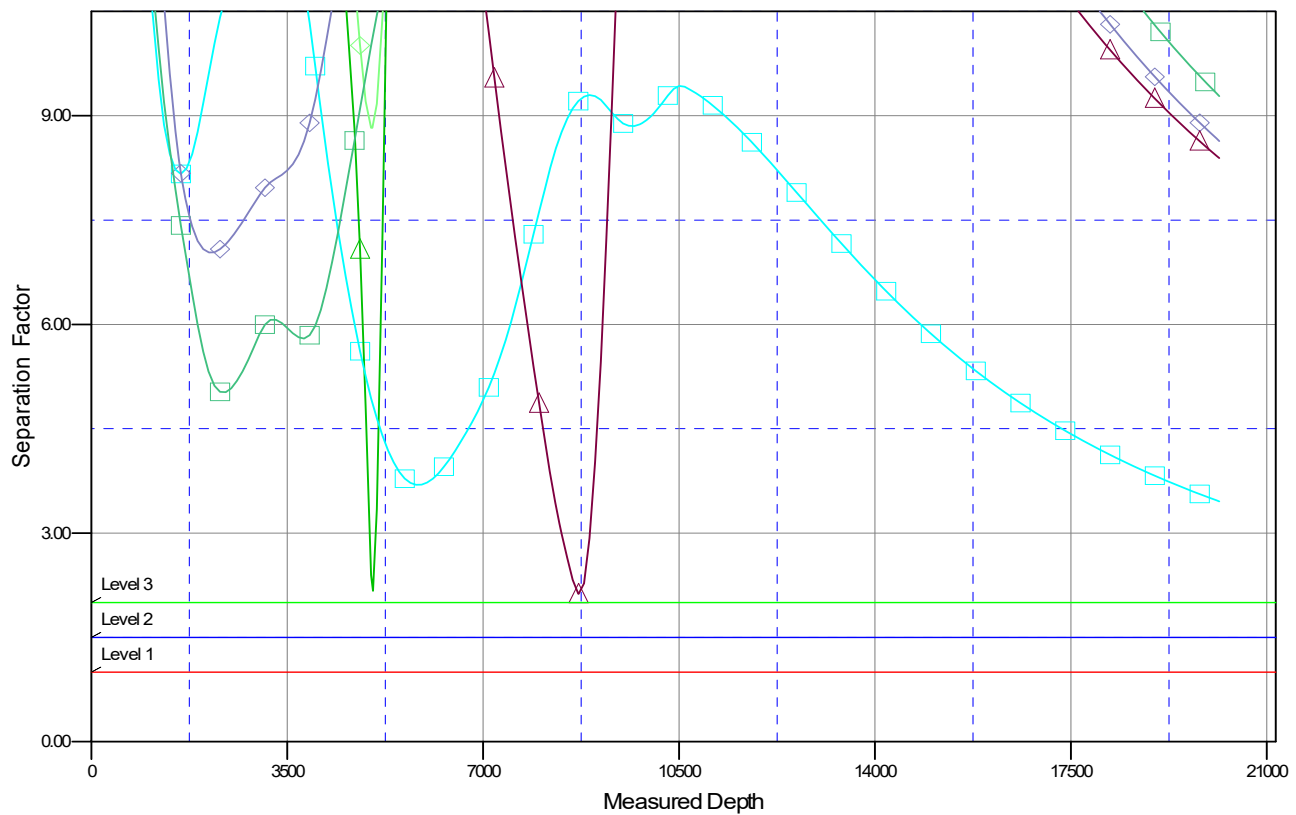
Central Meridian is -104.333334

Coordinates are relative to: Double Stamp Fed Com 122H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.319°

Separation Factor Plot



LEGEND

Belco AA Federal 2H, Wellbore #1, Surveys V0	Double Stamp Fed Com 121H, Wellbore #1, Design #1 V0	Double Stamp Fed Com 124H, Wellbore #1, Design #1 V0
Belco AA Federal 2H, Wellbore #1, ModSurveys (from Surface) V0	Double Stamp Fed Com 111H, Wellbore #1, Design #1 V0	Double Stamp Fed Com 123H, Wellbore #1, Design #1 V0
Queenie 15 1H, Wellbore #1, Surveys V0	Double Stamp Fed Com 115H, Wellbore #1, Design #1 V0	Double Stamp Fed Com 113H, Wellbore #1, Design #1 V0
Belco AA Federal 4H, Wellbore #1, Surveys V0	Double Stamp Fed Com 116H, Wellbore #1, Design #1 V0	
Double Stamp Fed Com 125H, Wellbore #1, Design #1 V0	Double Stamp Fed Com 126H, Wellbore #1, Design #1 V0	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	☐ Initial Submittal
			☒ Amended Report
		☐ As Drilled	

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-54002	Pool Code 53560	Pool Name SALT LAKE; BONE SPRING
Property Code 336572	Property Name DOUBLE STAMP FED COM	Well Number 122H
OGRID No. 332195	Operator Name CIVITAS PERMIAN OPERATING, LLC	Ground Level Elevation 3531'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
N	14	20-S	32-E	-	549' S	1694' W	N 32.5674378	W 103.7399690	LEA

Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
D	11	20-S	32-E	-	5' N	331' W	N 32.5949469	W 103.7443922	LEA

Dedicated Acres 640.00	Infill or Defining Well -	Defining Well API -	Overlapping Spacing Unit (Y/N) -	Consolidated Code -
Order Numbers -			Well Setbacks are under Common Ownership: ☐ Yes ☐ No	

Kick Off Point (KOP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
M	14	20-S	32-E	-	50' S	331' W	N 32.5660745	W 103.7443944	LEA

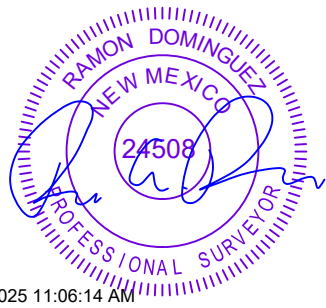
First Take Point (FTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
M	14	20-S	32-E	-	100' S	331' W	N 32.5662120	W 103.7443944	LEA

Last Take Point (LTP)

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
D	11	20-S	32-E	-	100' N	331' W	N 32.5946858	W 103.7443923	LEA

Unitized Area or Area of Uniform Intrest -	Spacing Unity Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation -
--	--	------------------------------------

OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief; and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received The consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i>  01/07/2025		SURVEYORS CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  1/7/2025 11:06:14 AM	
Signature Nathan Bennett		Signature and Seal of Professional Surveyor	
Date 01/07/2025		Date 1/7/2025 11:06:14 AM	
Print Name nbennett@civiresources.com		Certificate Number	Date of Survey 08/11/2022
E-mail Address			

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	☐ Initial Submittal
			☒ Amended Report
		☐ As Drilled	
Property Name and Well Number DOUBLE STAMP FED COM 122H			

SURFACE LOCATION (SHL)

NEW MEXICO EAST
NAD 1983
X=724133 Y=570674
LAT.: N 32.5674378
LONG.: W 103.7399690
NAD 1927
X=682953 Y=570612
LAT.: N 32.5673162
LONG.: W 103.7394728
549' FSL 1694' FWL

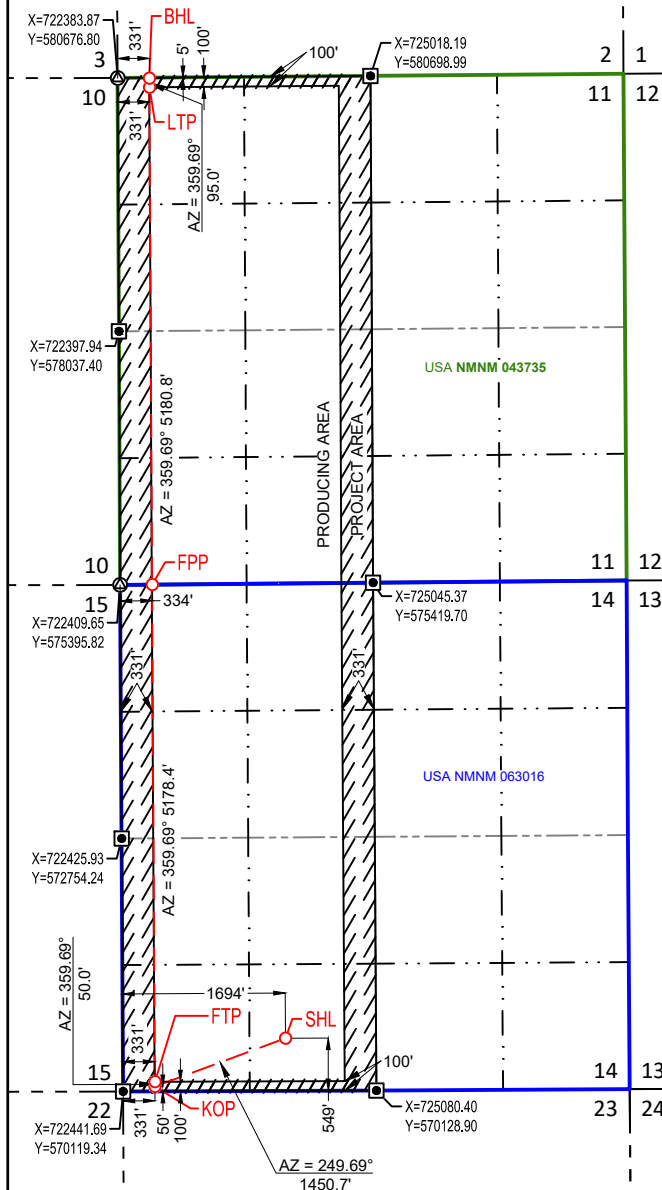
KICK OFF POINT (KOP)

NEW MEXICO EAST
NAD 1983
X=722772 Y=570171
LAT.: N 32.5660745
LONG.: W 103.7443944
NAD 1927

X=681592 Y=570108
LAT.: N 32.5659530
LONG.: W 103.7438981
50' FSL 331' FWL

FIRST TAKE POINT (FTP)

NEW MEXICO EAST
NAD 1983
X=722772 Y=570221
LAT.: N 32.5662120
LONG.: W 103.7443944
NAD 1927
X=681592 Y=570158
LAT.: N 32.5660904
LONG.: W 103.7438981
100' FSL 331' FWL

**FED PERF. POINT (FPP)**

NEW MEXICO EAST
NAD 1983
X=722744 Y=575399
LAT.: N 32.5804456
LONG.: W 103.7443933
NAD 1927
X=681563 Y=575337
LAT.: N 32.5803241
LONG.: W 103.7438965
0' FSL 334' FWL

LAST TAKE POINT (LTP)

NEW MEXICO EAST
NAD 1983
X=722715 Y=580580
LAT.: N 32.5946858
LONG.: W 103.7443923
NAD 1927
X=681535 Y=580517
LAT.: N 32.5945644
LONG.: W 103.7438949
100' FNL 331' FWL

BOTTOM HOLE LOCATION (BHL)

NEW MEXICO EAST
NAD 1983
X=722715 Y=580675
LAT.: N 32.5949469
LONG.: W 103.7443922
NAD 1927
X=681535 Y=580612
LAT.: N 32.5948255
LONG.: W 103.7438948
5' FNL 331' FWL

SURVEYORS CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
08/11/2022

Date of Survey
Signature and Seal of Professional Surveyor:



Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 425412

CONDITIONS

Operator: Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 425412
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	1/30/2025
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing.	1/30/2025